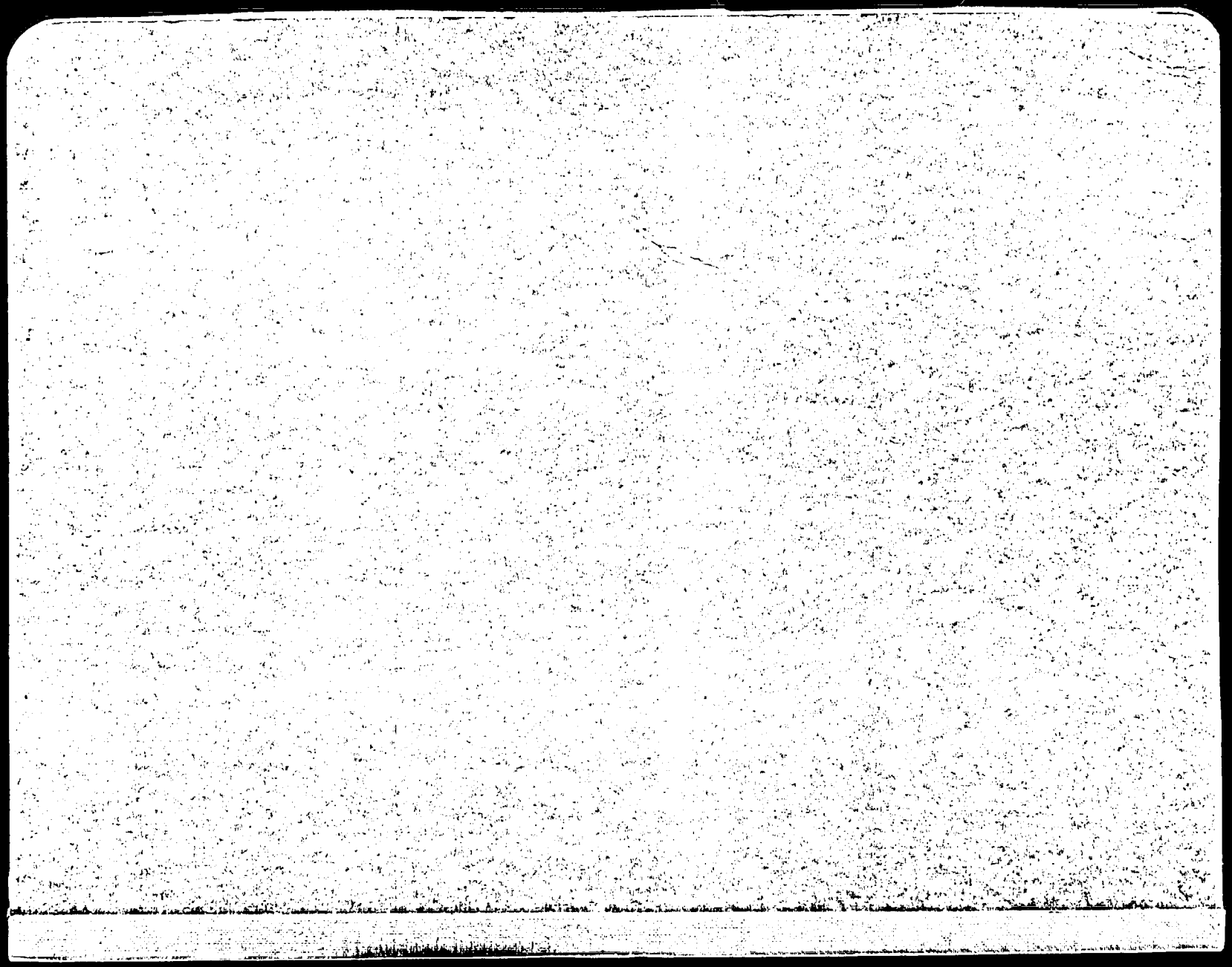
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PUBLIC VERSION

FEDERAL TRADE COMMISSION

STAFF REPORT ON THE CIGARETTE ADVERTISING INVESTIGATION

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MAY 1981

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In addition to the information in this Report, the Commission has also relied upon confidential information provided by the cigarette companies and their advertisement agencies pursuant to subpoena which has been deleted from the Introduction and Chapters II, III, IV and V of the version of the report released to the public. The beginning of each of these chapters describes the confidential material deleted.

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INTRODUCTION*

In 1964, following the issuance of the Report on Smoking and Health of the Advisory Committee to the Surgeon General,[1] the Federal Trade Commission found that the mounting evidence of the "grave hazards to life and health" caused by cigarette smoking, together with the failure of the cigarette manufacturers to warn consumers of this danger, constituted "an unfair or deceptive act or practice within the meaning of Section 5 of the Federal Trade Commission Act."[2] The Commission concluded that if consumers did not know about the health risks of smoking, cigarette advertising which failed to disclose these dangers was unfair or deceptive. Prompted in 1969 and in 1971 by the same concern, the Commission again took formal action to require cigarette manufacturers to better inform the public in their advertisements about the dangers of

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* In addition to the information in this report, the Commission relied on confidential information submitted by the cigarette companies pursuant to subpoena. The confidential information has been deleted from the version released to the public. The locations where the information has been deleted are noted [Confidential Information Omitted].

[1] U.S. Department of Health, Education and Welfare, Smoking and Health: Report of the Advisory Committee to the Surgeon General of the Public Health Service (1964) ("1964 Surgeon General's Report").

[2] The Trade Regulation Rule for the Prevention of Unfair or Deceptive Advertising and Labeling of Cigarettes in Relation to the Health Hazards of Smoking, 29 Fed. Reg. 8324, 8325, 8356 (July 2, 1964). ("The 1964 Cigarette Rule"). For a detailed discussion of previous actions of the Federal Trade Commission with regard to cigarette advertising, see Chapter IV, Section I, infra.

Source: https://www.industrydocuments.ucsf.edu/docs/ggmk0000

smoking. As a result, all cigarette advertisements today contain the same health warning Congress required on cigarette packages, "Warning: The Surgeon General Has Determined That Cigarette Smoking Is Dangerous To Your Health."[3]

The need to inform consumers adequately about the serious health consequences of cigarette smoking has also been a major concern of Congress. In 1965 Congress passed the Federal Cigarette Labeling and Advertising Act requiring all cigarette packages sold or distributed in the United States to contain the following warning: "Caution: Cigarette Smoking May Be Hazardous to Your Health." In addition, the Act required the Federal Trade Commission to transmit a report to Congress annually on the effectiveness of cigarette labeling, current cigarette advertising practices and the need for additional legislation.[4] In 1970 Congress passed the "Public Health Cigarette Smoking Act" requiring all cigarette packages to contain the current revised warning and making it unlawful to advertise cigarettes on radio or television.[5]

As in 1964, this is a particularly appropriate time for consideration of whether current cigarette advertising adequately warns consumers of the health hazards attributable to smoking and whether new action is needed. In 1979 the Surgeon General issued the

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[3] Lorillard, et. al., 80 F.T.C. 455 (1972).

[4] 15 U.S.C. §1331 et. seq (1965).

[5] 15 U.S.C. §1331 et. seq. (1970).

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Source: https://www.industrydocuments.ucsf.edu/docs/pgmf0068

II. STAFF BELIEVES THE CURRENT WARNING IS INEFFECTIVE

The current health warning was included in cigarette advertisements as a result of consent orders signed by the six major cigarette companies and the Commission in 1972.[16] The current investigation was begun to determine whether the deceptive practices which previously had caused Congress and the Commission to act have been effectively remedied. Therefore, the effectiveness of the current warning as a remedy had to be reexamined. After careful examination, the staff believes that the current warning is not effective in curing the deception in cigarette advertising, nor does it provide sufficient information to permit consumers to assess the health risks of smoking accurately.[17]

There are two major objective indicia of the ineffectiveness of the current warning, discussed in detail below. First, as the staff's investigation of consumer knowledge has demonstrated, a substantial portion of the public remains uninformed about the hazards of smoking. Second, tests conducted by the FTC [Confidential Information Omitted] indicate that the warning is neither noticed nor read by the vast majority of people. The underlying causes of the current warning's ineffectiveness are discussed below.[18]

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16 Lorillard, et al., 80 F.T.C. 455 (1972).

17 See Ch. III, supra.

18 The reasons discussed in this section do not constitute the only reasons for the current warning's ineffectiveness. As will be explained in detail, infra at Ch. V, the unchanging size and shape of the current warning contribute to its ineffectiveness.

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Source: https://www.industrydocuments.ucsf.edu/docs/ggmk0000

most comprehensive report on smoking and health in 15 years.[6] The 1100 page 1979 Report, based on an analysis of more than 30,000 articles and scientific studies on the relationship between tobacco consumption and health, confirms and expands the conclusions of the 1964 Surgeon General's Report. The 1979 Report confirms the evidence demonstrating the relationship of smoking to diseases, such as cancer, heart attack and chronic obstructive lung disease. It also establishes the relationship between smoking and a number of other health hazards about which little was known in 1964. These include the effects of smoking during pregnancy on the developing fetus and the newborn child, the increased risk of lung cancer in women who smoke, the interaction between smoking and birth control pills and the interaction between smoking and certain occupational hazards.

In November 1980, the Surgeon General issued another major report entitled, Promoting Health/Preventing Disease: Objectives For The Nation.[7] This report sets out specific objectives for fifteen priority areas designated by the Surgeon General as the most essential for achieving our national health aspirations and goals. Smoking is one of the fifteen priority areas designated. In fact, this Report finds that smoking is this nation's "single most important preventable cause of death" and that particular attention

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[6] Office of Smoking and Health, U.S. Department of Health, Education and Welfare, Smoking and Health: A Report of the Surgeon General (1979) ("1979 Surgeon General's Report").

[7] Office of Smoking and Health, U.S. Department of Health and Human Services, Promoting Health/Preventing Disease: Objectives For The Nation (1980).

Source: https://www.industrydocuments.ucsf.edu/docs/gggh0000

needs to be given to groups the Surgeon General designates as "high risk groups," such as "pregnant women, children and adolescents who initiate smoking at a young age."[8] Indeed, more teenagers are smoking today than ever and they are starting to smoke at a younger age. The Surgeon General concludes that more can and must be done to inform the public about the health threat caused by smoking. He then makes a number of specific recommendations, including:

-continuing the FTC requirement of a health warning in advertising;

-increasing the visibility and strengthening the content of the present warning to give the consumer additional needed information on the specific multiple health hazards of smoking, giving special consideration to rotational warnings and to the identification of special vulnerable groups;

-conducting educational campaigns directed both to the general public and to specific groups, such as women, especially pregnant women, youths, workers exposed to toxic substances and to others at special risk.[9]

The American Medical Association also has long been concerned about the need to inform consumers about the health hazards of smoking. In 1953, it banned tobacco advertising from AMA

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8 Id. at 117.

9 Id. at 119-123.

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Source: https://www.industrydocuments.ucsf.edu/docs/ggnk0000

publications.[10] In 1968 the AMA House of Delegates adopted a resolution calling for the AMA to take a strong stand against smoking with every means at its disposal.[11] Recently, the AMA Council on Scientific Affairs made several recommendations regarding smoking, including a recommendation that the AMA urge physicians to alert their patients to the risks of smoking and encourage them to quit smoking. The Council also urged the AMA to recommend that the FTC seek to eliminate the use of role models in cigarette advertising and that it require warning labels to be displayed on packages, advertisements and billboards.[12] In addition, in recent years several members of the life insurance industry have publicized the fact that they offer preferred rates to nonsmokers because they have concluded that nonsmokers are better health risks than smokers.[13]

In December 1980, the President's Advisory Committee For Women issued its report, entitled Voices For Women,[14] on the status of women in the United States. While this is the ninth Presidential Advisory Committee report on the subject, it is the first such report

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[10] Smoking and Health Council on Scientific Affairs, 243 Journal of the American Medical Association 779 (1980).

[11] Id.

[12] Id., at 781.

[13] See, e.g., Cowell, M.J. & Hirst, B.L., State Mutual Life Insurance Company of America, Mortality Differences Between Smokers and Nonsmokers (1979).

[14] 1980 Report of the President's Advisory Committee for Women, Voices For Women (1980).

Source: https://www.industrydocuments.ucsf.edu/docs/ggmk0000

to recognize smoking as an issue of particular significance to women.[15] As the President's Advisory Committee notes, although for many years smoking has been seen as a man's health problem, "[s]moking may well prove to be the major health problem facing women in the 1980's."[16] The Advisory Committee also finds that smoking is the "leading controllable cause of rising morbidity and mortality in adult American women,"[17] and that the Office of Smoking and Health of the Department of Health and Human Services, the federal agency with primary responsibility for public education programs on smoking, is "understaffed, underhoused and underfunded."[18] As did the Surgeon General, the President's Advisory Committee concluded that more must be done to increase public awareness of the health hazards of smoking.

The findings and recommendations of these reports and the fact that it has been nearly a decade since the Commission and Congress last reviewed whether consumers were being adequately warned about the health effects of smoking indicate the need for a re-examination of this issue. This particular investigation was begun in May 1976 to determine whether Congress and the Commission's prior actions with regard to cigarette advertising, or the independent action of cigarette manufacturers in the interim, had effectively remedied the

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15 Id. at 50.

16 Id. at 50, 57.

17 Id. at 58.

18 Id.

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Source: https://www.industrydocuments.ucsf.edu/docs/gpnk0000

deceptive practices which previously had caused Congress and the Commission to act.

The Commission staff focused its present investigation on five major issues. They are: (1) In light of the substantial growth of medical information in recent years, what are the known health consequences of smoking? (2) What health information does cigarette advertising contain about the nature, probability and severity of the dangers of smoking? (3) Does the public already know these facts, or does a substantial portion of the population lack knowledge of or hold false beliefs about the dangers of smoking? (4) Is the current warning effective in alerting the public about the health hazards of smoking? (5) Is remedial action necessary? If so, what remedial measures, if any, are likely to result in the public being provided with sufficient health information to avoid any possible deception in cigarette advertising?

The issues presented by the current investigation are more complex than they were when the Commission first took action in 1964. In 1964, the Surgeon General had just published his first comprehensive report on smoking and health, and cigarette packages and advertisements contained no health warnings. Similarly, in 1969 and 1971, cigarette advertisements contained no health warnings. Thus, while the focus has previously been on the threshold question of whether to require a health warning at all, it now is necessary for the first time to examine the effectiveness of the warning -- the remedy adopted a decade ago -- and determine whether current cigarette advertising may be deceptive.

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Source: https://www.industrydocuments.ucsf.edu/docs/gpnk0000

This report discusses in detail the results of the staff's investigation. As part of its investigation, staff has conducted an extensive review of the medical literature, including the Surgeon General's reports on smoking and the Tobacco Institute's response. It has sought out and examined the literature which discusses the views and findings of those who disagree with the Surgeon General's conclusions and has consulted with many of the foremost medical experts in the field. To evaluate the extent of consumers' knowledge of the health risks of smoking, staff conducted an exhaustive review of the available survey data and sponsored two additional nationally projectable surveys. The staff's evaluation of the current warning is based on the results of several additional studies, the analysis of the consumer knowledge data and the advice of communications and advertising experts, including a New York advertising agency. Similarly, to evaluate the remedial options, the staff conducted several studies and worked closely with both distinguished advertising experts and the same New York advertising agency.

SUMMARY OF FINDINGS [19]

The past efforts of the Commission plus the efforts of Congress and other governmental agencies and private organizations to increase the amount of health information available to consumers have had an important impact. Many more consumers now are aware that smoking is hazardous to their health than in 1964. The percentage of Americans who smoke cigarettes has declined significantly over the same time

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[19] The facts upon which this summary is based and the supporting data and sources for these facts are contained in the remaining Chapters of this report.

Source: https://www.industrydocuments.ucsf.edu/docs/ggnk0000

period, and a substantially larger number of those who do smoke now smoke cigarettes with lower levels of "tar" and nicotine.

Nonetheless, the problems which prompted the Commission to act in the past still exist. While most Americans are generally aware that smoking is hazardous, some consumers, especially smokers, do not know this basic fact. However, even if it is assumed that <u>every</u> consumer is aware that smoking is hazardous, the evidence indicates that many consumers do not have enough information about the health risks of smoking in order to know <u>how dangerous smoking is</u>, i.e., what is the nature and extent of the health risk of smoking. Many consumers also do not know whether the general health risks of smoking have any <u>personal relevance</u> to themselves or whether they are among those groups of people who may be uniquely vulnerable to these health hazards. Finally, without more specific, concrete information, consumers have a more difficult time remembering and are less likely to consider health information at all in making their smoking decision.

More specifically, the data discussed in Chapter III suggest that many consumers do not know enough about the health effects of smoking to know how dangerous smoking is and indeed desire more information about the specific hazards of smoking. For example, the data indicate that many do not know what diseases are smoking related. Over 30% of the public is unaware of the relationship between smoking and heart disease. Nearly 50% of all women do not know that smoking during pregnancy increases the risk of stillbirth and miscarriage. Approximately 30% of those polled do not know about the relationship between smoking, birth control pills and the risk of heart attack.

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Source: https://www.industrydocuments.ucsf.edu/docs/gqdc0000

Some of the health consequences of smoking, such as lung cancer and emphysema, are more well known. However, even for lung cancer, the most well known health effect, some gaps in consumer knowledge are evident. Thus, approximately 20% of those polled do not know that smoking causes cancer.

The data also indicate that substantial numbers of consumers seriously misunderstand and underestimate the increased risk of suffering these health problems as the result of smoking. For example, the survey data discussed in Chapter III indicate that over 40% of those polled did not know that smoking caused most (80%) cases of lung cancer and nearly one-quarter of those polled did not even know it causes many cases. Similarly, although the evidence indicates that smoking causes about 70% of all cases of chronic obstructive lung disease (emphysema and chronic bronchitis), approximately 60% of the public does not know that most cases of emphysema are smoking-related, and one-third of those polled are even unaware that many cases of emphysema are smoking-related. In addition, over 50% of the population does not know that smoking causes many as opposed to just a few cases of heart attack.

As the evidence in the section in Chapter III on "Overall Risk" demonstrates, many more consumers seriously underestimate the severity or increased risk of dying from these smoking-related illnesses. A thirty year old smoker will shorten his life on the average by between six to eight years if he smokes a pack or more a day. However, among those polled in the 1980 Roper study, 30% of the population and 41% of the smokers did not know that a typical thirty-year old male shortened his life expectancy at all by smoking.

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Source: https://www.industrydocuments.ucsf.edu/docs/gpkh0000

Finally, the survey data indicate that a large number of people do not believe that they will personally suffer the health consequences of smoking. Thus, although the medical evidence clearly indicates that smoking only a few cigarettes a day can be harmful, nearly one-third of those polled and 40% of smokers polled believed that only heavy smoking is dangerous. Similarly, although the Surgeon General has concluded that low "tar" cigarettes have not been shown to be safe, over one-third of the smokers polled falsely believe that it has been proven that by smoking low "tar" cigarettes, smokers do not significantly increase their health risks over nonsmokers. Another example may be particularly important for nonsmokers, especially young people deciding whether to experiment with smoking. Although many experts now classify cigarettes as an addictive substance, many teenagers believe smoking is okay if they quit before it becomes a habit and approximately 50% of all those polled did not know that smoking may be addictive.

The importance of the fact that many consumers do not know about the health effects of smoking is heightened by the following. The medical evidence gathered over the past two decades indicates that cigarette smoking is far more dangerous to health than was thought in 1964. Smoking causes more than 300,000 deaths annually (one out of seven of all deaths) in this country. Last year alone over 80,000 people died from lung cancer caused by smoking. An additional 34,000 died from smoking-related emphysema and chronic bronchitis and well over 200,000 heart attack deaths were attributable to smoking. Recent research has strengthened the evidence demonstrating the relationship of smoking to lung cancer and other cancers, heart

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Source: https://www.industrydocuments.ucsf.edu/docs/[illegible]

attack and chronic obstructive lung disease (emphysema and bronchitis). It has also established the relationship between smoking and a number of other health hazards about which little was known in 1964. These include the effects of smoking during pregnancy on the developing fetus and the newborn child, the development of lung cancer in women and the interaction between smoking and birth control pills.

In 1978, 54 million Americans smoked a total of 615 billion cigarettes. Many of those smokers are uninformed about the serious health consequences of smoking. The gap between the documented health effects of smoking and consumers' knowledge of these dangers is illustrated by a comparison of the following statements summarizing the health consequences of smoking (Summary A) with the following chart summarizing the best available survey data of the public's knowledge in this area (Summary B):

Summary A

HEALTH CONSEQUENCES OF SMOKING[20]

OVERALL RISK

-Cigarette smoking is the greatest environmental cause of death in the U.S.; well over 300,000 deaths annually are smoking related.

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[20] For a discussion of the evidence from which this chart is compiled, see Chapter I, Section II.

Source: http://www.industrydocuments.ucsf.edu/docs/gmgf0227

-To put this in perspective, annually more than one out of every seven deaths in this country are smoking related.[21] Each year six times as many people in this country die from smoking related causes as die from automobile accidents.[22]

-Overall, a smoker is 70% more likely to die at a given age than is a comparable nonsmoker.

-A two pack or more a day smoker decreases his life expectancy more than eight years; one pack or more a day, six years.

-The earlier one starts smoking, the more likely one is to die from it.

CANCER

-Smoking is the number one cause of lung cancer in this country, accounting for 80% of all lung cancer deaths.

-Last year, more than 80,000 people died of lung cancer caused by smoking.

-70% of lung cancer patients die within one year, 90% within five years.

-Smokers are 10 times more likely to die from lung cancer than nonsmokers. Heavy smokers (two packs or more per day) are 20 times more likely.

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[21] For example, the total number of deaths from all causes in this country in 1978 was 1,931,100. American Heart Association, Heart Facts 1978 at 9.

[22] National Highway Traffic Safety Administration statistics indicate that 50,226 people were killed in the U.S. in 1978 in automobile accidents. National Highway Traffic Safety Administration, U.S. Department of Transportation, 1978 Annual Report: Fatal Accident Reporting System, September 1979.

Source: https://www.industrydocuments.ucsf.edu/docs/fggk0000

OTHER CANCERS

-Cigarette smoking has been established as a significant cause of cancer of the larynx, oral cavity, esophagus, and bladder, and is significantly associated with cancer of the pancreas and kidney.

-There is a synergistic relationship between smoking and use of alcohol that greatly increases the risk of cancer of the larynx, oral cavity, and esophagus for those who smoke and drink heavily.

-Estimated 1980 cancer deaths (other than lung cancer deaths) attributable to smoking:

Types Of Cancer	Total Deaths X Percent Attributable to Smoking	Total Deaths Attributable to Smoking
Larynx	3500 X 65%	2275
Esophagus	7600 X 60%	4560
Oral	8800 X 56%	4928
Bladder	10300 X 30%	3090
Renal	7900 X 30%	2370
Pancreas	20900 X 30%	6270
		23,493

Thus, approximately 40% of all cancer deaths in these categories is smoking-related.

HEART DISEASE

-Heart disease accounts for nearly one-half of all deaths in this country; cigarette smoking accounts for 1/3 of all heart disease deaths.

-In 1978, 225,000 heart disease deaths were attributable to cigarette smoking.

-Smoking is one of three major risk factors of heart attack.

-Smoking nearly doubles a person's risk of heart attack.

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Source: https://www.industrydocuments.ucsf.edu/docs/ggmk0000

CHRONIC OBSTRUCTIVE LUNG DISEASE (Emphysema and Chronic Bronchitis)

-Smoking is the major cause of both emphysema and chronic bronchitis.

-70-80% of all emphysema and chronic bronchitis deaths each year are attributable to smoking.

-In 1979, there were more than 34,000 smoking-related emphysema and chronic bronchitis deaths.

PREGNANCY AND INFANT HEALTH

-Maternal smoking during pregnancy significantly increases the risk of spontaneous abortion.

-Maternal smoking during pregnancy increases the risk of still-birth or infant death within a month of birth by at least 20% for light smokers (less than one pack a day), and by 35% for those who smoke more than one pack a day.

-Mothers who smoke have been found to be 36%-47% more likely to give birth prematurely.

-Babies born to women who smoke during pregnancy weigh an average of 200 grams (about half a pound) less than babies born to comparable women who do not smoke during pregnancy.

BIRTH CONTROL PILLS

-A woman who smokes and takes birth control pills is 10 times as likely to suffer a heart attack as a woman who does neither.

-A woman who smokes and takes birth control pills is 20 times more likely to suffer stroke by cerebral hemorrhage than a woman who does neither.

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Source: https://www.industrydocuments.ucsf.edu/docs/qgmk0000

CARBON MONOXIDE

-Carbon monoxide is one of the harmful ingredients of cigarette smoke.

-Carbon monoxide reduces the amount of oxygen delivered to the cells.

-Carbon monoxide in the levels found in cigarette smoke is dangerous to people with heart or lung disease.

-Carbon monoxide is suspected to be the most important factor in causing spontaneous abortion, stillbirth, neonatal death, reduced birth weight babies and other complications associated with maternal smoking during pregnancy.

-Carbon monoxide may be responsible for causing increased risk of heart disease associated with smoking.

The overall extent to which millions of consumers lack knowledge of or hold false beliefs about these basic, important medical facts is in part revealed by the following chart:

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Source: https://www.industrydocuments.ucsf.edu/docs/ggmk0000

SUMMARY B
KNOWLEDGE CHART[a]

AREA	Medical Fact Study Tested	% of total population unaware[b]	% of smokers unaware[c]	# of Adults unaware[d]	# of smokers unaware[e]
OVERALL RISK	Smoking is hazardous to health - Gallup, 1978 Roper	9-10%	13-17%	15 million	5-10 millic
	A thirty-year old man reduces his life expectancy by smoking a pack a day - 1980 Roper	30%	41%	50 million	20 million
	Light smoking is dangerous - 1978 Roper	31%	40%	50 million	20 million
CANCER	[Confidential Information Omitted]				
	Smoking causes lung cancer - Gallup,	19-23%	27-38%	30- million	15-million
	[Confidential Information Omitted]				
	Smoking causes most cases of lung cancer - 1980 Roper	43%	49%	70 million	25 million
	Smoking causes cancer of the mouth and esophagus - Gallup, Chilton[f]	15-21%	15-27%	25-35 million	10-15 millic

a/ For a description of the surveys upon which this chart is based, see Ch. III.

b/ Percent unaware includes those who say they do not believe true statements, believe false statements, underestimate on a multiple choice question, or answer "don't know" or "uncertain". When there are two or more studies, the results are presented as a range.

c/ Computed as described in Fn. b, supra.

d/ Based on 160 million adults 17 years of age and older. See, Surgeon General's 1979 Report, Appendix A-11.

e/ Based on 54 million smokers. See, Surgeon General's 1979 Report, A-11.

f/ All references to Chilton in this study are based on the adult sample. Chilton also tested teens, and gave separate results for their teen sample.

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Source: https://www.industrydocuments.ucsf.edu/docs/ggmk0000

AREA	Medical Fact Study Tested	% of total population unaware[b]	% of smokers unaware[c]	# of Adults unaware[d]	# of smokers unaware[e]
	Smoking is a major cause of cancer of the mouth, esophagus, and larynx - 1980 Roper	32%	39%	50 million	20 million
HEART DISEASE	Smoking causes heart disease - Gallup,	32-	37-	50- million	20- millic
	[Confidential Information Omitted]				
	Smoking is a major cause of heart disease - Chilton	40%	45%	60 million	25 million
	Smoking greatly increases risk of heart attack - 1980 Roper	25%	31%	40 million	15 million
BRONCHO-PULMONARY DISEASE	Smoking causes bronchitis and emphysema- Chilton,	9-	9-	15- million	5- mill
	[Confidential Information Omitted]				
	Smoking causes many cases of bronchitis and emphysema - 1980 Roper	34-55%	39-60%	55-60 million	20-30 millic
	Smoking causes most cases of bronchitis and emphysema - 1980 Roper	59-82%	63-85%	95-130 million	35-45 millic
PREGNANCY AND INFANT HEALTH	Maternal smoking increases the risk of miscarriage and stillbirth - Chilton, 1980 Roper	47[g]-48%	54-58%	75 million	30 million
ADDICTION	Smoking is addictive - 1978 Roper	54%	49%	85 million	25 million

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g/ Based on women in the 1980 Roper study.

Source: https://www.tobaccodocuments.org/

AREA	Medical Fact Study Tested	% of total population unaware[b]	% of smokers unaware[c]	# of Adults unaware[d]	# of smokers unaware[e]
LOW TAR/ NICOTINE	It has not been proven that low-tar and nicotine cigarettes do not significantly increase risk of disease. 1980 Roper	33%[h]	36%[h]	55 million	20 million
CARBON MONOXIDE	Cigarette smoke contains carbon monoxide - Chilton, 1980 Roper	45-53%	38-53%	70-85 million	20-30 millio

h/ Not including those who answered "Don't know if it's true."

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As a result of these findings, staff undertook a re-evaluation of the current warning. After careful examination, staff believes that the current warning is not effective. The number of persons who understand that smoking is a health problem has increased in the last decade. However, surveys show that the public still lacks enough information about the risks of smoking to appreciate how dangerous it is. This gap in knowledge may be due to the fact that the current warning refers to the health hazard of smoking only in the most generalized way. The warning does not communicate information on significant, specific risks that have recently been identified. Furthermore, after nearly a decade the current warning has been overexposed and has simply worn out. This conclusion is further supported by data indicating that less than 3% of adults exposed to cigarette ads ever even read the warning. While cigarette ads present their message in a variety of frequently changing, attention getting formats using numerous image provoking, personalizable themes, the current abstract warning in the same rectangular shape has appeared unchanged in every cigarette ad for so long that few people ever notice or pay attention to it. The failure of the warning to provide specific health information and the abstract nature of the current warning, which makes it more difficult for consumers to relate the warning to themselves, contribute to its ineffectiveness. Thus, while the current health warning may have represented a reasonable remedial effort nearly a decade ago based upon the evidence then available, the continued growth of medical knowledge about the health consequences of smoking and new evidence about the present ineffectiveness of the current warning indicate that a new informational remedy may now be necessary.

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SUMMARY OF RECOMMENDATIONS

Based upon the evidence obtained in this investigation, staff is concerned that current cigarette advertising practices may mislead consumers by omitting material facts about the health risks of smoking. Staff has also tentatively concluded that additional action designed to provide consumers with more information about the health consequences of smoking is necessary. In Chapter V the staff has considered a number of remedial options, including: (a) educational efforts of other governmental and private organizations; (b) voluntary industry self-regulation; (c) alteration of the size and shape of the warning; (d) replacement of the current warning with a single new, more specific warning; (e) replacement of the current warning with a rotational warning system; (f) placement of limitations on the use of imagery in cigarette advertising, known as "tombstone advertising;" and (g) disclosure of carbon monoxide levels.

Of the options explored, staff at this preliminary stage believes the following are likely to be most effective: (a) additional funding for expanded educational efforts, such as public service announcements; (b) changing the shape and increasing the size of the current warning; and (c) replacing the current warning with a system of short rotational warnings.

Expanded educational efforts, such as public service announcements broadcast during prime viewing hours, would reach millions of consumers. Changing the size and shape of the warning would improve its noticeability, but would not provide consumers with

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the additional necessary health information. Replacing the current warning with a more specific, single new warning would be an improvement; however, having more than a single warning would allow greater information to be available to the public and, thereby, decrease the possibility of deception. Rotating the various health warnings would also assist in maintaining their noticeability over an extended period, and would more effectively communicate a substantial amount of specific health information about which millions of consumers are uninformed. To be more effective these changes should involve the warning both on cigarette packages and in cigarette advertisements. While the adoption of any one of these remedial options by itself would not eliminate the problems discussed in this report, the adoption of the three options staff tentatively believes to be most effective as part of an overall educational effort would provide the public with additional health information and remedy any possible deception in cigarette advertising.

In light of the findings, conclusions and recommendations in this report, the staff recommends that: (a) copies of the staff report should be provided to Congress for its consideration, (b) the report should be released for public comment, (c) the Commission should continue its investigation, while working with Congress, members of the industry and appropriate governmental and private organizations to coordinate and determine what action should be taken by whom; and (d) after the close of the comment period, the staff should report back to the Commission with an analysis of the information obtained from public comments and a further recommendation as to whether additional or formal Commission action is necessary and appropriate.

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CHAPTER I. THE PREVALENCE AND HEALTH EFFECTS OF SMOKING

I. SMOKING PREVALENCE

In order to evaluate the significance of the limited health information available from cigarette advertisements and the fact that many consumers do not know about many of the most significant facts about the health effects of smoking (See Chapters II and III, infra), it is necessary to examine the evidence on smoking trends and the prevalence of cigarette smoking in this country. Since the issuance of the Surgeon General's Report in 1964, the percentage of Americans who smoke cigarettes has declined from 42% of the population in 1964 to 33% of the population in 1978.[1] During this time period, health warnings were placed on cigarette packs and ads, cigarette advertising was banned from the broadcast media, several Surgeon General's reports on the hazards of smoking were issued, and a number of education efforts designed to increase the public's knowledge of the health hazards of smoking were undertaken.[2]

As the percentage of smokers in the population has changed, so too has the cigarette that is being smoked. There have been two significant developments in cigarettes over the past 30 years. The

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[1] Office of Smoking and Health, U.S. Department of Health, Education and Welfare, Smoking and Health: A Report of the Surgeon General (1979) ("1979 Surgeon General's Report"), Appendix at 11.

[2] A recent study by the Commission's Bureau of Economics found that while it is not possible to determine the precise impact of each of these individual informational efforts on the decline in cigarette consumption, these educational programs did have a beneficial impact on consumer behavior as well as on consumer knowledge. Bureau of Economics, Staff Report on Consumer Responses to Cigarette Health Information, August 1979.

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first was the replacement of regular cigarettes with filtered ones. Filter-tipped cigarettes, which were introduced in 1952, accounted for 65% of consumption in 1964 and comprise over 90% of the market today.[3] The second change has been the reduction in "tar" content of cigarettes sold. Cigarettes with less than 15 mg. of "tar" have increased their market share from 2.0% in 1967 to 40.9% in 1979.[4]

In 1978, over 54 million smokers smoked 615 billion cigarettes.[5] In 1979, total U.S. consumption of cigarettes rose to 620 billion.[6] In the first six months of 1980, Americans smoked approximately 315 billion cigarettes, an increase over the same period of 1979.[7]

Smoking rates have declined significantly only among adult males and have increased among teenaged women. The percentage of adult male smokers went from 51.1% in 1965 to 37.5% in 1978.[8] The decline has not been as large with women smokers. Between 1964 1979, the percentage of adult women smokers declined by 5%, from 33

[3] Id.

[4] Most of these sales are of cigarettes with more than 9 mg. but less than 15 mg. "tar." Less than 11% of sales in 1979 were for cigarettes with 9.0 mg. "tar" or below. Preliminary figures for the F.T.C.'s Annual Report to Congress on Cigarette Advertising for the Year 1979.

[5] 1979 Surgeon General's Report, Preface at vii.

[6] U.S. Department of Agriculture, Tobacco Situation, September 1980 at 5.

[7] Id.

[8] 1979 Surgeon General's Report, Appendix at 9.

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Actual 33.3 to 28.2 %

to 28%.[9] Most of this decline has taken place since 1976,[10] but, in 1978, almost 25 million adult women smoked.[11]

Smoking prevelance among young people has also not declined as significantly as among adult males. Between 1968 and 1979 smoking among boys aged 12 to 18 declined only from 14.7% to 10.7%.[12] In contrast, over the same period, smoking among all teenaged girls increased from 8.4% to 12.7%.[13] Indeed, among 17 to 18 year-olds, 26.2% of girls, as compared to 19.3% of boys, smoke, the only age level where female smokers outnumber males.[14] Overall, more teenagers are smoking today than ever and they are starting to smoke at a younger age.[15] This is especially significant because the earlier one begins to smoke, the stronger the habit is likely to become and the more difficult it will be to break.[16] Cannot substantiate reference on these pages.

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[9] Office on Smoking and Health, U.S. Department of Health, Education and Welfare, The Health Consequences of Smoking for Women: A Report of the Surgeon General (1980) ("1980 Surgeon General's Report on Smoking and Women") at 23.

[10] Id., Preface at v.

[11] National Center for Health Statistics, Changes in Cigarette Smoking Practices Among Adults (1979) Table 2 at 2978.

[12] The National Institute of Education, U.S. Department of Health, Education and Welfare, Teenage Smoking: Immediate and Long-Term Patterns (1979) at 7.

[13] Id., at 8. Although smoking rates for teenaged girls overall have risen, smoking rates among girls aged 15 to 16 have decreased from 20.2% in 1974 to 11.8% in 1979.

[14] Id.

[15] 1980 Surgeon General's Report on Smoking and Women at 325.

[16] Id.

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The decline in the percentage of adults who smoke has been accompanied by a rise in the number of cigarettes consumed per smoker, especially for female smokers.[17] In 1966, 34.7% of male smokers aged 21 and over smoked 25 or more cigarettes daily. In 1975, the percentage had increased to 36%.[18] Among female smokers 21 and over, the percentage who smoke 25 or more cigarettes daily rose from 16.9% in 1966 to 22.8% in 1975.[19]

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17 1979 Surgeon General's Report, Appendix at 17.

18 Id., Appendix at 18, Table 8.

19 Id.

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II. HEALTH EFFECTS OF SMOKING

A. Introduction

The 1979 Surgeon General's Report concludes that "[c]igarette smoking is the single most important environmental factor contributing to premature mortality in the United States."[20] The 1979 Report, based on over 30,000 articles on smoking and health, confirms, strengthens and expands the conclusions of the 1964 Surgeon General's Report, which was the first comprehensive domestic report to conclude that smoking is a major threat to health.[21]

Since 1964, scientists and physicians have learned more about virtually every aspect of the adverse health effects of smoking, and the Surgeon General has issued seven additional reports on smoking and health. Researchers have learned much about several areas that received little attention in the 1964 Report but which are discussed in considerable detail in the 1979 Report, including the effects of maternal smoking during pregnancy on the fetus and newborn child, the development of lung cancer in women, the health effects of carbon monoxide and the interaction between smoking and birth control pills. Recent research has also strengthened the evidence demonstrating the relationship of smoking to lung and other cancers, heart attack and chronic obstructive lung disease. So much has been learned about smoking and health that the preface to the 1979 Surgeon

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(20) Id. Ch. 2 at 9 (emphasis added).

(21) Id., Secretary's Forward at i.

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General's Report declares "...the scientific evidence on the health effects of smoking is overwhelming."[22] After more than 30 years of research, the evidence now shows that cigarette smokers suffer from significantly higher rates of death (mortality) and illness (morbidity) than nonsmokers.[23] Overall, a smoker is 70% more likely to die at a given age than is a comparable nonsmoker.[24] The increased death rate is even more dramatic when viewed in terms of life expectancy. On the average, a thirty year old heavy smoker (two or more packs a day) decreases his life expectancy by more than eight years.[25] Although people who smoke more are most likely to die at an early age, even males who smoke only one to nine cigarettes a day have substantially higher mortality

(22) Id., Preface at vii.

(23) Id., Ch. 2 at 12-15. During the past thirty years there have been eight massive prospective epidemiological studies that analyzed the effect of smoking on mortality or death rates. These eight studies, involving more than 16 million person years of experience, analyzed over 300,000 deaths.

Epidemiology is the science dealing with the factors that determine the frequency and distribution of disease in the population. Dorland's Medical Dictionary 459 (23rd ed. 1957).

Epidemiological studies may be prospective or retrospective. A prospective study is one which starts with a group of people who do not have the disease being studied. The group is divided into smokers and nonsmokers and then followed over a period of time to determine which people develop the disease. In a retrospective study, the researcher studies patients who already have the disease and a control group of people who do not have the disease and calculates the percentage of smokers in each group.

(24) 1979 Surgeon General's Report, Ch. 2 at 43.

(25) Id.

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rates than comparable nonsmokers.[26] Significantly, the data also reveal that the younger one starts smoking, the greater the risk of premature death[27] and the longer one smokes, the more that person increases the risk of dying prematurely as a result of smoking.[28]

Many disease causing agents increase the likelihood of death from only one disease or affect only one bodily organ. By contrast, cigarette smoking increases the death rate for several diseases in various parts of the body. Heart disease is the chief contributor to premature death caused by smoking.[29] Lung cancer is second and chronic obstructive lung disease (emphysema and chronic bronchitis) is third.[30]

Smokers not only die younger than nonsmokers, they are also sick more often. Overall, smokers are more likely to have chronic conditions than nonsmokers.[31] * Smokers miss more days of work due

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(26) Light smokers are 20%-45% more likely to die at a given age than are comparable nonsmokers. Id., Ch. 2 at 15-17.

(27) Id., Ch. 2 at 19-21.

(28) Id., Ch. 2 at 17-18.

(29) Id., Ch. 2 at 39.

30 It is estimated that lung cancer will kill 101,000 people in 1980. 1980 Surgeon General's Report on Smoking and Women at 7. Eighty percent of these deaths are believed to be due to smoking. Holbrook, Tobacco Smoking, in Harrison's Principles of Internal Medicine, 960 (9th ed. K. Isselbacher, 1980).

There were 46,000 deaths from chronic obstructive lung disease in 1977. 1980 Surgeon General's Report on Smoking and Women at 160. Approximately 70% of these deaths are due to smoking. Holbrook, supra, at 940.

(31) 1979 Surgeon General's Report, Ch. 3 at 10.

* Charts on pg #9 compares "present + former" smokers and "persons who ever smoked" - 1-7

NOT NON SMOKERS who never smoked!

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to injury and illness than do nonsmokers and spend more days in bed due to illness.[32] It is estimated that smoking causes a total loss of over 81 million work days each year, accounting for over 20% of all work days lost.[33] In the report of the National Commission on Smoking and Public Policy, the direct health care costs for 1975 due to smoking were estimated as between 11.1 and 11.4 billion dollars, while the 1977 figures were estimated at 15 billion dollars. A National Dilemma: Cigarette Smoking or the Health of Americans (1978) at 4.

The Surgeon General's Reports are not the only extensive evaluations of the medical evidence to conclude that cigarette smoking is a serious health hazard. The same conclusion has also been reached by virtually every major organization which has studied the issue, including the World Health Organization[34] and the National Commission on Smoking and Public Policy that was organized by the American Cancer Society.[35] For example, the National Commission concluded:

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[32] Id., Ch. 3 at 12.

[33] Id., Ch. 3 at 13.

[34] World Health Organization, Smoking and Its Effects on Health (Technical Series, No. 568, 1965).

[35] Report of the National Commission on Smoking and Public Policy, American Cancer Society, Inc., A National Dilemma: Cigarette Smoking or the Health of Americans (1978).

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Cigarette smoking remains the largest single unnecessary and preventable cause of illness and early death.[36]

Research sponsored by the tobacco industry also points to the dangers of smoking. In 1978, the American Medical Association Education and Research Foundation ("AMA-ERF") published a volume entitled Tobacco and Health that summarized almost ten years of research in the area of cigarette smoking and health that was financed by the cigarette manufacturers and supervised by the AMA-ERF. The 795 studies reported in this volume are almost exclusively clinical, rather than epidemiological, and are focused on laboratory examination of the effects of various constituents of cigarette smoke. The research did not focus on cancer because cancer research was being generously financed by other sources.[37] Nonetheless, based only on the research conducted under its own general direction, the AMA-ERF Committee for Research on Tobacco and Health concluded that the "tar" in cigarette smoke contains potent "co-carcinogens".[38] The AMA-ERF Committee, again basing its findings solely on the research produced under its direction, did address the association between smoking and chronic obstructive lung disease. It concluded:

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36 Id., at 3. The National Commission's conclusion was an affirmation of the identical conclusion reached by the United States Public Health Service in its 1975 report entitled The Health Consequences of Smoking.

37 American Medical Association Education and Research Foundation, Tobacco and Health (1978) at xiii.

38 Id.

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> Cigarette smoking plays an important role in the development of chronic obstructive pulmonary diseases and constitutes a grave danger to individuals with preexisting diseases of the coronary arteries.[39]

The medical evidence has also been confirmed by studies by the American insurance industry. Several life insurance companies explicitly recognize that nonsmokers are better health risks than smokers and charge higher premiums to smokers. One insurance company has published a detailed description of its experiences in offering nonsmokers preferred rates.[40] The company's report concludes:

> On the basis of our experience, we have confirmed that the mortality differentials between smokers and nonsmokers are large enough to validate the separate identification of these two groups for life insurance underwriting purposes.[41]

Thus, cigarette smoking indisputably is a major health hazard.

The individual diseases associated with smoking are discussed in the sections that follow. As the discussion will illustrate, the overall effect of smoking is striking.

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39 Id.

40 Cowell, M.J. & Hirst, B.L., State Mutual Life Assurance Company of America, Mortality Differences Between Smokers and Nonsmokers (1979).

41 Id., at 16.

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B. Cancer

Cigarette smoking has been established as a major cause of cancer of the lung, larynx, oral cavity, esophagus, and bladder and is significantly associated with cancer of the pancreas and kidney.[42]

1. Lung Cancer

Lung cancer kills more people in the United States than does any other malignant disease.[43] Cigarette smoking is by far the most important cause of lung cancer in men and women, causing at least 80% of all lung cancer cases in the United States.[44] In 1980, lung cancer will cause an estimated 101,000 deaths, or over 275 deaths each day.[45] Of these deaths, more than 80,000 are attributable to lung cancer caused by cigarette smoking.[46] Moreover, persons who develop lung cancer have little chance of long-term survival. Seventy percent of lung cancer patients die within one year of diagnosis and 90% die within five years.[47]

The weight of the evidence establishing the relationship between smoking and lung cancer now "exceeds by several times" that available

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(42) 1979 Surgeon General's Report, Ch. 5 at 31, 36, 42, 44, 49, 53.

(43) Id., Ch. 5 at 9.

(44) Id., Ch. 5 at 31. Holbrook, supra, at 940.

(45) 1980 Surgeon General's Report on Smoking and Women at 7 and Errata Sheet.

(46) Holbrook, supra, at 940.

(47) 1979 Surgeon General's Report, Ch. 5 at 31.

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in 1964.[48] The 1964 Surgeon General's Report concluded that cigarette smoking was "causally related to lung cancer in men" and that the data for women "point[ed] in the same direction."[49] By 1979, it could be stated categorically that "[c]igarette smoking is the major cause of lung cancer in both men and women."[50] The 1980 Surgeon General's Report includes an excellent discussion of the relationship of smoking to the development of lung cancer in women. While it was once thought that women might be less susceptible to lung cancer than men, the data now reveal that differences in lung cancer rates between males and females have been due merely to differences in their smoking habits.[51] Recent years have seen a rapid increase in lung cancer rates among women, reflecting the fac that women first began to smoke in large numbers some 25 to 30 year after the increase in cigarette smoking among men. Currently, the rise in lung cancer death rates among women is "much steeper" than men. At the current rates of increase, lung cancer death rates amc

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(48) 1979 Surgeon General's Report, Ch. 5 at 31.

(49) U.S. Dept. of Health, Education, and Welfare, Smoking and Health: Report of the Advisory Committee to the Surgeon General of the Public Health Service (1964) ("1964 Surgeon General's Report")

(50) 1979 Surgeon General's Report, Ch. 5 at 31 (emphasis added).

(51) 1980 Surgeon General's Report on Smoking and Women at 131, 134. Smoking among women became prevalent more recently than among men, and women tended to smoke in ways that decreased the risk of lung cancer. That is, women tended to smoke fewer cigarettes per day, inhale less smoke, and to smoke lower "tar" and nicotine, filter cigarettes. Id., at 134-135.

Not found on pp 134-135 in final report on page 114

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women will surpass breast cancer (the number one cancer in women) death rates in the early 1980's.[52]

The combined data from the eight largest prospective epidemiological studies help establish the carcinogenic effects of smoking[53] and reveal that "cigarette smokers on the average are 10 times as likely to develop lung cancer as nonsmokers."[54] For those who smoke two or more packs of cigarettes per day, the risk of lung cancer is twenty times that of the nonsmoker.[55]

The strong dose-response relationship between cigarette smoking and the development of lung cancer further establishes the causal relationship between smoking and lung cancer. The data reveal that the more one is directly exposed to cigarette smoke, the greater is that person's risk of developing lung cancer. For example, the number of cigarettes smoked per day, the number of puffs per

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(52) Id., at 152. Not at p. 152 - p. 109-110

(53) These studies are described in a chart in the 1979 Surgeon General's Report, Ch. 2 at 13. The single most often-cited research effort establishing the carcinogenic effects of smoking is a prospective epidemiological study begun by the American Cancer Society (ACS) in 1959. This study enrolled more than 1,000,000 men and women, ranging in age from 30 to 100 and living in 25 states. Hammond, Smoking in Relation to the Death Rates of One Million Men and Women (National Cancer Institute Monograph No. 19). All segments of the population were included in the ACS study, except migrant workers and similar groups that could not have been traced over an extended period of time. The subjects completed a detailed questionnaire, including information concerning smoking habits. They were traced at regular intervals through 1972, and the oldest subjects still are being traced periodically, most recently in 1978. Hammond & Seidman, Smoking and Cancer in the United States, 9 Preventive Med. 171 (1980).

(54) 1979 Surgeon General's Report, Ch. 5 at 11.

(55) Id., Ch. 5 at 12-13.

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cigarette, the depth of inhalation, and the age of initiation of smoking all have been shown to affect the risk of development of cancer.[56]

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[56] Id., Ch. 5 at 12.

The epidemiological evidence has been supported well by the obtained from other kinds of research, including pathological st and animal studies. In a well-known study conducted at the Vete Administration Hospital in East Orange, New Jersey, cross-sectio lung tissue from the lungs of men who had died from lung cancer men who had died from other causes were analyzed in blind fashio Auerbach, Stout, Hammond, & Garfinkel, Changes in Bronchial Epithelium in Relation to Cigarette Smoking and in Relation to L Cancer, reprinted from 265 New England J. Med. 253-67 (1961). A same time, information about the smoking histories of these peop was obtained from their families. When tissue analysis was comb with the data on smoking habits, it became clear that increased amounts of smoking were associated with "tremendous increase in number of atypical [pre-cancerous] cells." Id. at 17. Thus, th study strengthened the already overwhelming epidemiologic evider that cigarette smoking is a major cause of lung cancer. Id.

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2. Other Cancers

The other cancers associated with cigarette smoking also kill a large number of people. In 1980, more than 23,000 people will die from smoking-related malignancies other than lung cancer, including cancer of the larynx, oral cavity, esophagus, urinary bladder, pancreas, and kidney.[57] Cigarette smokers have a laryngeal cancer mortality rate that is 6 to 13 times greater than that of nonsmokers.[58] For cancer of the oral cavity, mortality rates for smokers range from 3 to 10 times those of nonsmokers.[59] For smokers, the risk of esophageal cancer ranges from nearly twice to nearly 9 times that of the nonsmoker.[60] On the average, cigarette smokers are twice as likely to die from cancer of the urinary bladder

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57 It has been calculated that cigarette smoking accounts for the following percentages of these cancer deaths: laryngeal 65%; esophageal 60%; oral 56%; bladder 30%; renal 30%; and pancreas 30%. (57 J. Nat'l Cancer Inst. 1207 (1976)). The American Cancer Society estimates for deaths from these cancers in 1980 (1980 Surgeon General's Report on Smoking and Women at 130) allow the following calculations:

	Total Deaths X % Attributable to Smoking	Total Deaths Attributable to Smoking
Larynx	3500 X 65%	2275
Esophagus	7600 X 60%	4560
Oral	8800 X 56%	4928
Bladder	10300 X 30%	3090
Renal	7900 X 30%	2370
Pancreas	20900 X 30%	6270

58 1979 Surgeon General's Report, Ch. 5 at 33.

59 Id., Ch. 5 at 39-40.

60 Id., Ch. 5 at 42-43.

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as nonsmokers.[61] Moreover, known specific carcinogens for the human bladder have been identified in cigarette smoke.[62] With respect to cancer of the kidney, mortality rates for cigarette smokers vary from 1-1/2 to 2-1/2 times those of nonsmokers.[63] Finally, with regard to pancreatic cancer, the mortality rate is approximately twice as high for cigarette smokers as for nonsmokers.[64] Significantly, a dose-response relationship with cigarette smoking has now been established for all of these forms of cancer.[65] Thus, heavy smokers incur risks substantially greater than the average risks noted above.

As with lung cancer, the conclusions regarding smoking and cancer of the larynx, esophagus, and oral cavity have been significantly strengthened and expanded since 1964.[66] Moreover, the association between cigarette smoking and cancer of the pancreas[67] and kidney[68] is based on new evidence, not reported in the 1964 Surgeon General's Report. In addition, the 1979 report establishes that there is a synergistic relationship between cigarette smoking and use

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61 Id., Ch. 5 at 45.

62 Id., Ch. 5 at 47.

63 Id., Ch. 5 at 48.

64 Id., Ch. 5 at 50.

65 Id., Ch. 5 at 37, 42, 44, 49, 53.

66 Id., Ch. 5 at 36, 42, 44.

67 Id., Ch. 5 at 53.

68 Id., Ch. 5 at 49.

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of alcohol that makes those who both smoke and drink alcoholic beverages heavily far more likely to develop cancer of the larynx, oral cavity, and esophagus than those who consume either cigarettes or alcoholic beverages alone.[69]

69 Id., Ch. 5 at 37, 42, 45.

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C. Heart Disease [70]

Coronary heart disease (CHD) accounts for nearly one half of the deaths in this country.[71] Heart attack - the most dramatic manifestation of coronary heart disease - is the single greatest cause of death in the United States.[72] There is no longer any doubt that cigarette smoking is an important "risk factor" for heart disease - that is, people who smoke significantly increase their chances of suffering from heart disease in the future.[73] Smoking is one of three major risk factors for heart attack, and no risk factor is more important.[74] In fact, cigarette smoking annually accounts for nearly one-third of all the deaths from coronary heart

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[70] Cigarette smoking has also been linked to other types of cardiovascular disease, including peripheral vascular disease and stroke. For a discussion of the relationship between smoking and peripheral vascular disease, see 1979 Surgeon General's Report, Ch. 4 at 52-55. For a discussion of the relationship between smoking, birth control pills and stroke, see Section G, infra.

[71] American Heart Association, Heart Facts, (1978) at 2.

[72] Id., at 5. See, also, National Commission on Egg Nutrition, et. al., 88 F.T.C. 89, 119 (1976) modified, 570 F.2d 157 (7th Cir. 1977) cert. denied 439 U.S. 821 (1978).

[73] 1979 Surgeon General's Report, Ch. 4 at 35; American Heart Association, Heart Facts, supra at 15. The precise mechanism by which cigarette smoking increases the risk of heart attack or other manifestations of heart disease has yet to be identified. Many experts believe that either the carbon monoxide or the nicotine in cigarettes is primarily responsible for the increased risk, but neither has been shown conclusively to be the responsible agent. 1979 Surgeon General's Report, Ch. 4 at 38-39.

[74] 1979 Surgeon General's Report, Ch. 2 at 41. The two other major risk factors are hypertension and high blood cholesterol.

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disease. The Surgeon General estimated that in 1978 alone, 225,000 CHD deaths were attributable to cigarette smoking.[75]

The evidence documenting the role of cigarette smoking as a major risk factor for CHD is now overwhelming.[76] As the Surgeon General noted, "[s]ystematic observations on the association between smoking and cardiovascular diseases have been made in considerably more than a million individuals in the United States alone and have involved many millions of person years of experience."[77]

Based on this voluminous evidence, the following facts can be stated conclusively concerning the relationship between smoking and cardiovascular disease:

1. Smoking nearly doubles one's risk of heart attack and other coronary heart disease.

Many age-adjusted studies consistently show that smoking increases the risk of heart attack or other coronary heart disease by a factor of two: i.e., smoking doubles the risk of suffering from CHD. The increased risk of coronary heart disease caused by smoking is greater for young people than older people,[78] greater for Americans than for people of some other countries,[79] and is

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[75] 1979 Surgeon General's Report, Secretary's Forward at ii.

[76] The Commission has previously recognized that smoking is a major risk factor for CHD. See, National Commission on Egg Nutrition, 88 F.T.C. at 120, finding of fact by ALJ #54, adopted in Commission Opinion at 201-02.

[77] 1979 Surgeon General's Report, Ch. 4 at 63.

[78] Id., Ch. 4 at 35.

[79] Some studies in other countries indicate a less important role for cigarette smoking in contributing to CHD. For example, a study

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independent of other risk factors of CHD, such as high blood cholesterol levels and high blood pressure.[80] The relationship between coronary heart disease and smoking exists when either deaths or total CHD events are analyzed, and remains remarkably constant across the various studies performed in this country.[81] The data on women is not as extensive as the data on men, but several studies of coronary heart disease in women indicate that the heart disease risk for women smokers is also about twice that of their non-smoking counterparts.[82]

A few of the major studies which document the increased risk of CHD attributable to smoking are summarized below.[83]

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79 (Footnote Continued)

of Japanese smokers revealed only a slight increase of CHD risk over that of nonsmokers. Hirayama, 1967, summarized in 1979 Surgeon General's Report, Ch. 4 at 24. This is most likely explained by the fact that the Japanese have such low blood cholesterol levels that heart attacks from all causes are relatively rare among Japanese, and in any event does not at all modify the conclusion that smoking is a major cause of CHD in the United States. 1979 Surgeon General's Report, Ch. 4 at 37.

80 Studies of Americans which hold constant other major risk factors, such as blood cholesterol level and blood pressure, find cigarette smoking a powerful predictor of CHD. See, e. g., the Framingham Heart Study, summarized by Doyle, et. al., 1964, cited in 1979 Surgeon General's Report, Ch. 4 at 22, 37.

81 1979 Surgeon General's Report, Ch. 4 at 65.

82 1980 Surgeon General's Report on Smoking and Women at 102.

83 Data obtained from 1979 Surgeon General's Report, Ch. 4 at 22-25.

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STUDY	SAMPLE	FINDINGS
Hammond and Horn, 1958	187,783 190,000 males, 50-64 years of age in 9 states	Smokers had 1.7 times the risk of death from heart disease of non-smokers. Smokers of one to two packs a day had 2.2 times the risk; two pack a day or more smokers had 2.4 times the risk.
Doyle, et. al., 1964	4,000 males, Framingham, MA, Albany, NY 30-62 years of age.	All smokers, 2.4 times the risk of death from heart disease than non-smokers. More than a pack a day smokers had 3.5 times the risk of death.
Pooling Project, American Heart Association, 1970	427 about 7,400 males, 30-59 years of age.	One pack a day smokers 1.7 times the risk; more than one pack a day smokers had 3 times the risk of death from heart disease than nonsmokers.
Kannel, et. al., 1968	127 5,000 males and females, 30-59 years of age.	Male smokers had 1.5 times the risk of suffering a heart attack than non-smokers, females had a relative risk of 1.7.
Shapiro, et. al., 1969	110,000 males and females, 35-64 years of age.	Both males and females had twice the risk of suffering from CHD if they smoked. For two packs or more a day smokers, the risk was about 6 times that of a nonsmoker.

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2. The more cigarettes smoked, the greater the risk of CHD.

One of the most striking characteristics about the relationship between smoking and heart disease is that it is dose-responsive; heavier smokers run a much greater risk than lighter smokers, and lighter smokers run a greater risk than nonsmokers. The dose-responsive nature of the smoking--heart disease relationship is evident from the chart above: Hammond and Horn reported a relative risk (compared to nonsmokers) of 1.7 for all smokers, 2.2 for one pack a day smokers, and 2.4 for two pack a day smokers. Both Doyle, et. al., and the Pooling Project found that people who smoked more than a pack a day had three times the risk of nonsmokers, and a considerably greater risk than lighter smokers. Two pack a day smokers were about six times more likely to suffer a heart attack than nonsmokers in the Shapiro study. The dose-response nature of the relationship between cigarette smoking is also an important element in establishing that smoking causes heart disease.[84]

3. The risk of CHD decreases if smoking is stopped.

Another important element in determining the link between coronary heart disease and smoking is what epidemiologists refer to as "cessation" data: what happens to people when they stop smoking?

The evidence strongly indicates that cessation of smoking will reduce the risk of heart disease. Two major studies illustrate this point. Hammond and Garfinkle, 1969, reported that while current

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84 1979 Surgeon General's Report, Ch. 4 at 66.

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smokers had nearly double the risk of heart attack of nonsmokers, ex-smokers suffered only a slightly greater risk than nonsmokers.[85] Among heavy smokers, those currently smoking had twice the risk of heart attack than those who had quit.[86] The Pooling Project study found that ex-smokers had virtually the same risk of CHD death as nonsmokers, while smokers' risk was 1.7 times greater, and 3 times greater for smokers of more than a pack a day.[87]

4. Conclusion

The Surgeon General summarized the massive data linking smoking and heart disease as follows:

> In industrialized societies which share about the same general nutritional and metabolic circumstances as the United States, it has been shown repeatedly that cigarette smoking is associated with myocardial infarction [heart attack] and death following infarction when compared to the risk among nonsmokers. The effect is dose-related in terms of years of smoking, number of cigarettes smoked per day, and the habit of inhaling. The association is generally consistent, reproducible and predictive. It is independent in the sense that its effect is found when other risk factors for heart disease are controlled in statistical analysis...Cessation of smoking reduces, over time, the increased risk attributable to smoking toward the risk of nonsmokers. 1977 Surgeon General Report, Ch. 4 at 35.

The Surgeon General's Report carefully considered the issue of causation with respect to smoking and heart disease in 1979. It

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(85) Smokers had a 90% increased risk over nonsmokers; ex-smokers had about a 15% increased risk. 1979 Surgeon General's Report, Ch. 4 at 34.

(86) 1979 Surgeon General's Report, Ch. 4 at 34.

(87) Id.

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acknowledged that correlation is not synonomous with causation. It considered the major argument raised against the conclusion that causation has been demonstrated, and, based on the massive evidence, rejected that argument.[88] Ultimately, the Report concluded that:

> Given the characteristics of its association with heart attack (such as strength, graded relationship, independence, consistency, antecedence, loss of relationship on withdrawal, predictive capability, and a degree of coherence), it can be concluded that smoking is causally related to coronary heart disease in the common sense of that idea and for purposes of preventive medicine. 1979 Surgeon General's Report, Ch. 4 at 66.

[88] It has been suggested that the increased incidence of heart disease among smokers might be explained by individual characteristics of smokers, rather than smoking itself. In other words, the argument runs, people who smoke also coincidentally are people more likely to have a heart attack, but smoking isn't actually related to heart attack. This is the so-called "constitutional" argument: smokers are more prone to heart attack than nonsmokers, because of underlying constitutional differences between the groups. See, e.g., Seltzer, Smoking and Coronary Heart Disease: What Are We To Believe? 100 American Heart Journal 275 (1980). However, proponents of this argument have never been able to identify any characteristic of smokers that might account for this increased risk, and studies which control for known risk factors demonstrate smoking acts independently of other factors to cause heart disease. Moreover, the constitutional hypothesis is logically inconsistent with the established dose-response relationship between smoking and heart disease, and the reduction in risk of heart disease among people who quit smoking. For example, the reduction in risk upon cessation "is contrary to the constitutional concept as expressed above, unless further complex assumptions are made and it is assumed that large numbers of individuals underwent a change in their underlying constitutional factor in midlife, acquired low risk, and ceased to smoke because of that new constitution." Thus, the Surgeon General concluded, based on all the evidence, that "the constitutional hypothesis... does not provide a credible basis to doubt that cigarette smoking is a cause of coronary heart disease." 1979 Surgeon General's Report, Ch. 4 at 66.

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D. Chronic Obstructive Lung Disease (Emphysema and Chronic Bronchitis)

1. Mortality and morbidity

Cigarette smoking is the major cause of emphysema and chronic bronchitis.[89] These disorders reduce the lungs' ability to inhale oxygen and to exhale carbon dioxide.[90] At their early stages the most important symptoms of these diseases may be a slight reduction in exercise capacity.[91] As they progress, these disorders make breathing increasingly difficult.[92] In their advanced stages, they can cause death.[93]

Chronic bronchitis and emphysema are frequently difficult to distinguish and usually coexist in the same person.[94] Consequently, the two disorders are collectively labeled "chronic obstructive lung disease" ("COLD") or "chronic airflow obstruction."[95] These terms accurately describe the symptoms of both diseases and make it unnecessary to identify them separately.

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89 1979 Surgeon General's Report, Ch. 2 at 41.

90 Unlike lung cancer, these disorders are not malignant. The non-malignant lung diseases are also called non-neoplastic bronchopulmonary diseases.

91 Ingram, Chronic Bronchitis, Emphysema, and Chronic Airway Obstruction, in Harrison's Principles of Internal Medicine, 1238-39 (9th ed. K. Isselbacher, 1980).

92 Id.

93 Id.

94 1979 Surgeon General's Report, Ch. 6 at 8.

95 Id. Although the symptoms of chronic bronchitis and emphysema are the same--an obstruction in expiratory flow accompanied by oxygen deficiency during exertion--the cause of the symptoms is different. Emphysema is characterized by a breakdown in the walls of the

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Chronic obstructive lung disease kills thousands of smokers each year. It is conservatively estimated that there were more than 34,000 smoking related deaths from chronic obstructive lung disease in 1979.[96] Numerous prospective and retrospective epidemiological studies have established that smokers are more likely than nonsmokers to develop chronic obstructive lung disease.[97] Six prospective studies representing a total of over 13 million patient years of observation and almost 270,000 deaths from all causes found that smokers were from 2.3 to 24.7 times more likely to die of chronic obstructive lung disease than were nonsmokers.[98] While the mortality ratios in these studies vary considerably, they all lead to

[95] (Footnote Continued)

alveoli, the tiny airsacks in the lungs from which oxygen is transferred to the blood and carbon dioxide is removed from the blood. The breakdown in the alveolar walls reduces the surface area of the lungs that is exposed to the bloodstream and diminishes the lungs' ability to deliver oxygen and remove waste gases. A conclusive diagnosis of emphysema can only be made after death through autopsy.

Chronic bronchitis can be diagnosed prior to death and is characterized by two main dysfunctions: (1) fixed narrowing of the airways and (2) mucous formation in the airways. If someone suffers from narrowing of the airways and extra production of mucous, both of which may be found by specialized tests of pulmonary function, for more than three months a year, two years in a row, that person is characterized as having chronic bronchitis.

96 See 1980 Surgeon General's Report on Smoking and Women at 160 in which it is reported that a total of 46,000 people died of COLD in 1977; n. 100, infra, where it is estimated that 70-80% of those deaths are smoking related.

97 1979 Surgeon General's Report, Ch. 6 at 9.

98 Id., Ch. 6 at 10.

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Cannot substantiate footnote 101, 102 unless we see actual study. Neither table shows number of cigs smoked.

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the same conclusion: smokers are far more likely to die from COLD than are nonsmokers.[99] In fact, experts estimate that 70%-80% of the chronic obstructive lung disease deaths each year are smoking related.[100]

There is also a strong dose-response relationship between smoking and death rates from chronic obstructive lung disease. The more one smokes, the more likely one is to die from emphysema or chronic bronchitis. One major study may be used to illustrate this dose-response relationship. A 20 year follow-up study of over 34,000 British physicians projected that light smokers (1-14 cigarettes per day) have an annual death rate from chronic obstructive lung disease of over 10 times the rate for nonsmokers while heavy smokers (25 or more cigarettes per day) have an annual chronic obstructive lung disease death rate of over twice that of light smokers.[101] Medium smokers (15-24 cigarettes per day) were projected to have a COLD death rate between the death rate of light and heavy smokers.[102]

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99 The variation in mortality rates may result from differences in diagnostic methods and an underestimation of deaths due to COLD. Id., Ch. 6 at 9.

100 Holbrook, Tobacco Smoking, in Harrison's Principles of Internal Medicine, 940 (9th ed. K. Isselbacher, 1980).

101 The study projected annual death rates of 88 per 100,000 for heavy smokers; 50 per 100,000 for medium smokers; 38 per 100,000 for light smokers; and 3 per 100,000 for nonsmokers. 1979 Surgeon General's Report, Ch. 6 at 10.

102 Id.

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Increased mortality is not the only problem caused by chronic obstructive lung disease. Chronic obstructive lung disease develops and progresses slowly, but continuously, over a period of years, and exacerbates the normal decline in pulmonary function that occurs with age. Because the symptoms of chronic obstructive lung disease develop over a long period of time and increase with age, chronic obstructive lung disease is usually a gradually incapacitating disorder, rather than a quickly fatal one. Its victims often suffer long term illness, disability or hospitalization before they die from chronic obstructive lung disease or other causes.[103] In fact, chronic obstructive lung disease is second only to coronary heart disease as a cause of Social Security disability compensation.[104]

Some of the effects of chronic obstructive lung disease are irreversible -- the breakdown of the alveolar walls in emphysema cannot be reversed.[105] One who stops smoking after developing the symptoms of chronic obstructive lung disease will almost immediately stop the acceleration of the development of chronic obstructive lung disease symptoms and may have some improved pulmonary function, but will not improve to his/her age-adjusted normal range.[106] In

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[103] Id.

In addition, it is well-established that smokers suffer from more minor respiratory symptoms than nonsmokers, including cough, sputum production and wheezing. These relationships are also dose-responsive. Id., Ch. 6 at 20.

[104] Id., Ch. 6 at 7.

[105] Id., Ch. 6 at 10.

[106] Id., Ch. 6 at 22-23.

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effect, chronic obstructive lung disease speeds one's normal age related decline in respiratory function. As a result, persons who have developed severe symptoms of chronic obstructive lung disease from smoking greatly increase their risk of dying of chronic obstructive lung disease even after they quit smoking. The authors of the British physicians study discussed above suggest that many of the ex-smokers they studied who died of chronic obstructive lung disease within 5-9 years of quitting, died because the irreversible decrease in lung function caused by smoking was worsened by the natural decline caused by age. [107]

2. The role of smoking in the development of chronic obstructive lung disease

Retrospective and prospective epidemiological studies have solidly established that smoking causes chronic obstructive lung disease. [108] Pathological studies have confirmed that there is a strong dose-response relationship between smoking and alveolar damage. [109] In addition, both clinical and pathological studies have

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[107] 1979 Surgeon General's Report, Ch. 6 at 10.

[108] Id., Ch. 2 at 4; Ch. 6 at 9. 2&9 just lists tables

[109] Id., Ch. 6 at 23-24.

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Despite these findings, physicians and scientists do not know exactly how chronic obstructive lung disease develops. Researchers have proposed and found support for three mechanisms by which smoking might lead to the development of chronic obstructive lung disease. These include (1) altering the protease-anti-protease balance in the lungs, (2) compromising immune mechanisms, and (3) interfering with pulmonary clearance mechanisms. 1979 Surgeon General's Report, Ch. 6 at 25-33. tables

Some experts suspect that the irritating gases in cigarette smoke

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linked smoking to functional lung changes such as small airways dysfunction, which may be a precursor of emphysema.[110]

Smoking may act synergistically with certain occupational exposures to increase the risk of chronic obstructive lung disease. A number of studies have found that workers exposed to cotton fibers, asbestos, granite dust, and coal dust increase their incidence of chronic obstructive lung disease.[111] When persons who are regularly exposed to these substances also smoke, they further increase their risk of developing chronic obstructive lung disease.[112]

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[109] (Footnote Continued)

contribute to the destruction of the alveolar walls as well as the cough and other signs of irritation found in chronic bronchitis. They believe that particulate matter in the "tar" in smoke contributes to the production of mucous and thickening of the lung membranes.

[110] Id., Ch. 6 at 12-19, 24.

[111] 1979 Surgeon General's Report, Ch. 6 at 7 36.

[112] Id., Ch. 7 at 36.

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E. Carbon Monoxide

Carbon monoxide ("CO") is now known to be one of the most harmful ingredients of cigarette smoke. Carbon monoxide, of course, is not a specific disease caused by smoking, but is a constituent of cigarette smoke that has been linked to many of the health hazards associated with smoking. Carbon monoxide is discussed here because, along with "tar" and nicotine, CO is now known to be an extremely harmful constituent of cigarette smoke, particularly with respect to maternal smoking during pregnancy, which is discussed in the next section.

Although CO was not even discussed in the 1964 Surgeon General's Report, the 1979 Surgeon General's Report identifies CO in cigarette smoke as a

> [P]ossible critical factor in coronary heart disease, atherosclerosis and sudden death, occupationally-related illness, chronic respiratory disease, fetal growth retardation, and the noxious effects of passive smoking.[113]

Carbon monoxide causes adverse health effects by reducing the blood's ability to carry oxygen to the cells. Hemoglobin, the compound in red blood cells that carries oxygen, combines more readily with CO than it does with oxygen. Thus, when CO combines with the hemoglobin in some red blood cells to form carboxyhemoglobin (COHb), there are fewer red blood cells available to deliver oxygen to the system.

[113] 1979 Surgeon General's Report, Preface at xiii. In addition to "tar," nicotine and CO, cigarette smoke has about 2,000 constituents, and although less is known about them, many of these other compounds are also thought to be hazardous. Id., Ch. 1 at 29.

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A nonsmoker is likely to have a carboxyhemoglobin level of about 1%.[114] In contrast, the average smoker has a COHb level of about 5%, and some one pack-a-day smokers may have COHb levels as high as 15%.[115] Individual smoking habits, such as depth and frequency of inhalation, also affect how much a cigarette will raise the carboxyhemoglobin level, but on the average each cigarette raises the COHb level by about .75%. The half-life of CO in the blood is about three to four hours, so after four hours the excess COHb caused by one cigarette will be reduced to somewhat less than .37%.[116] The length of time between cigarettes and the frequency, depth and total number of inhalations affect what the smoker's maximum daily COHb level will be.

The effects of CO on smokers fall into two general categories. First, there are acute effects -- the effects that occur immediately or soon after an individual smokes a cigarette. The second type involves the effect of CO in the pathogenesis or development of diseases associated with smoking. While acute effects may be noticed almost immediately, the pathogenesis of disease occurs over a long period of time.

1. Acute Effects

Carbon monoxide in the levels found in cigarette smoke presents the greatest danger to a person for whom low level oxygen deprivation

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114 Holbrook, Tobacco Smoking, in Harrison's Principles of Internal Medicine, 938 (9th ed. K. Isselbacher, 1979).

115 Id., at 938-39.

116 Drill, Pharmacology in Medicine, 936 (3rd ed. 1965).

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is hazardous. Thus, carbon monoxide exacerbates the symptoms of heart disease, chronic obstructive lung disease and anemia by reducing the delivery of oxygen to the system.[117] The particular cardiovascular diseases aggravated by CO include coronary heart disease, atherosclerosis, angina pectoris, cerebrovascular disease and peripheral vascular disease.[118] CO in cigarettes can also add to the already increased carbon monoxide levels of industrial workers or other people who are exposed to CO in the workplace or at other locations.[119]

CO in cigarette smoke is especially harmful to the developing fetus. Its effects are both acute in the sense that they are expressed relatively quickly, and long term, in that they may alter the outcome of pregnancy or the health of the child. Many, if not most, of the instances of perinatal death, complications of pregnancy and long term developmental problems that are associated with smoking are thought to result, at least in part, from the effects of CO on

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117 1979 Surgeon General's Report, Ch. 1 at 14, Ch. 11 at 34. Nothing about anemia

Aronow, Effects Of Passive Smoking On Angina Pectoris. 229 New England J. Med. 21-24 (1978).

Aronow, Ferlinz, & Glauser, Effects of Carbon Monoxide on Exercise Performance in Chronic Obstructive Pulmonary Disease, 63 Am. J. Med. 904-08 (1977).

118 1979 Surgeon General's Report, Ch. 4 at 47, 50; Ch. 11 at 27-28, 30, 34.

119 1979 Surgeon General's Report, Ch. 1 at 20; Ch. 7 at 8.

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the fetus.[120] Carbon monoxide in cigarette smoke reduces the oxygen-carrying capacity of the blood of both the mother and fetus.[121] Compounding this effect is carbon monoxide's action to reduce the pressure at which oxygen is delivered to the fetal cells.[122] Thus, not only does CO make the blood less able to carry oxygen, it also reduces the percentage of available oxygen that is actually delivered to the fetus.[123] As a result, the developing fetus receives less of the oxygen that it needs for its cells to multiply and grow and for the pregnancy to conclude successfully.

The effects of CO on people who are in good physical condition and are not pregnant have not been as well-established. There is evidence that levels of CO in the amount found in cigarette smoke

120 See, Longo, The Biological Effects of Carbon Monoxide on the Pregnant Woman, Fetus, and Newborn Infant, 129 Am. J. of Obstetrics and Gynecology 69-103 (1977).

121 1979 Surgeon General's Report, Ch. 1 at 20, Ch. 7 at 8.

122 Id., Ch. 1 at 21-22, Ch. 8 at 70-72. 1980 Surgeon General's Report on Smoking and Women at 9, 229, 272-75.

123 Numerous studies have shown that the ratio of placental weight to birth weight in babies of mothers who smoke is higher than for babies of nonsmokers. 1979 Surgeon General's Report, Ch. 8 at 11-17. Studies in animals have confirmed that carbon monoxide in the levels found in cigarette smoke reduces the oxygen carrying capacity of the blood and the partial pressure of oxygen in fetal blood, as well as increases the placental ratio. Id., Ch. 8 at 60-65. It is theorized that the increased weight of the placenta and reduced weight of the fetus in smoking mothers result from the system's response to relative fetal hypoxia (lack of oxygen). Id., Ch. 8 at 17. If the mother's system is unable to fully compensate for the reduced fetal supply of oxygen, it would not be surprising to see long term effects in the child's growth and development, as well as increased perinatal and neonatal death.

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decrease exercise performance.[124] In addition, some studies indicate that even low levels of CO may produce a slight deterioration in psychomotor performance, especially attentiveness and cognitive function.[125]

2. Pathogenesis

Carbon monoxide not only aggravates the symptoms of cardiovascular disease, it has also been cited as a factor in the development of coronary heart disease in the first place.[126] However, because coronary heart disease is caused by many factors and develops slowly, it is easier to identify cigarettes as a risk factor for coronary heart disease than to isolate CO as the causative agent.

3. Conclusion

Carbon monoxide in cigarette smoke is a serious health hazard. CO is harmful to anyone who has heart or lung disease or for whom a lowered oxygen level in the blood is dangerous. The developing fetus is particularly susceptible to the harms of low-level oxygen deprivation caused by carbon monoxide in cigarette smoke. It is possible that CO not only is dangerous to people with heart disease, but also is a factor in first causing heart disease.

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124 1979 Surgeon General's Report, Ch. 11 at 27.

125 Id., Ch. 11 at 34. Unclear if it impairs driving a car

126 Aronow, Effects of Cigarette Smoking and of Carbon Monoxide on Coronary Heart Disease, in Smoking and Arterial Disease (Greenhalgh ed. 1980).

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F. Smoking and Pregnancy

When the 1964 Surgeon General's Report on Smoking and Health was published, relatively little was known about the effects of maternal smoking on the fetus. In fact, the 1964 Report contained less than one page of discussion on the possible effects of smoking during pregnancy on the fetus and newborn infant. During the following years, physicians and scientists greatly increased their research in this area. The 1979 Surgeon General's Report and the 1980 Surgeon General's Report on Smoking and Women both contain lengthy scientific discussions of the effects on the fetus and newborn infant caused by smoking during pregnancy. The new conclusions reached in these discussions are summarized succinctly and unequivocally in the 1980 Report: "...cigarette smoking is a major threat to the outcome of pregnancy and the well being of the newborn baby."[127]

1. Fetal and infant mortality

Maternal smoking during pregnancy has been associated with several causes of fetal and perinatal death, including spontaneous abortion,[128] stillbirth,[129] respiratory distress syndrome,[130] pneumonia,[131] sudden infant death syndrome,[132] death from

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127 1980 Surgeon General's Report on Smoking and Women, Preface at 1. Does not contain that quote

128 1979 Surgeon General's Report, Ch. 8 at 30-32.

129 Id., Ch. 8 at 32.

130 Id.

131 Id.

132 Id., Ch. 8 at 44.

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prematurity and unknown causes,[133] and with an increased incidence of preterm deliveries.[134] The relationship of smoking to these causes of fetal and infant death is affected by other factors that increase the risk of complications of pregnancy and may vary according to the mother's age, socio-economic status, race, or other factors.[135] Although these variations make the relationship subject to some controversy, the relationship is sufficiently strong that the 1979 Surgeon General's Report concluded: "...maternal smoking can be a direct cause of fetal or neonatal death in an otherwise normal infant."[136]

The fetal and infant health problems associated with maternal smoking during pregnancy are labeled according to the length of time the complication or death occurs following conception. During the first 20-22 weeks of gestation, death of the fetus occurs as a result of a spontaneous or naturally occurring abortion. The period beginning 20-22 weeks after conception and continuing until four weeks after birth is called the perinatal period. Perinatal death occurring prior to successful delivery is known as a stillbirth. Perinatal death that occurs within four weeks of an infant's birth is called neonatal death.

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[133] Id., Ch. 8 at 47.

[134] Id., Ch. 8 at 42.

[135] Id., Ch. 8 at 28-29.

[136] Id., Ch. 8 at 47.

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a. Spontaneous abortion

Several prospective and retrospective studies have found that smoking during pregnancy increases the risk of spontaneous abortion and that the risk increases with the amount smoked.[137] Spontaneous abortions are difficult to study because of problems in ascertaining whether a spontaneous abortion has actually taken place.[138] But the studies that have been completed have been sufficient to lead the Surgeon General's Reports to conclude that smoking during pregnancy significantly increases the risk of spontaneous abortion.[139]

b. Perinatal mortality

(Stillborn and Neonatal Death)

Smoking during pregnancy also increases the risk of perinatal death.[140] Although the increased risk is greatest for the developing fetuses or newborn children of women who also have an increased risk of perinatal death for other reasons, including low socio-economic class, low education level, less than optimum maternal age or race,[141] all women who smoke during pregnancy increase the risk of perinatal mortality.[142] After adjusting the rates of

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137 1979 Surgeon General's Report, Ch. 8 at 30.

138 Id.

139 Id., Ch. 8 at 32; 1980 Surgeon General's Report on Smoking and Women at 243-45.

140 1979 Surgeon General's Report, Ch. 8 at 46.

141 Id., Ch. 8 at 33.

142 Id., Ch. 8 at 32-35.

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perinatal mortality for the effects of all other factors, an analysis of one large study found that light smokers (less than one pack per day) increase the risk of perinatal death by 20% and heavy smokers (more than one pack per day) increase the risk by 35%.[143] This relationship, confirmed by other studies, is highly significant, independent of other factors and dose-response related.[144]

Neonatal deaths of infants born to mothers who smoke result in part from complications associated with prematurity. Smoking significantly increases the risk of preterm delivery. Mothers who smoke have been found to be 36%-47% more likely to give birth prematurely.[145] Additionally, the few studies of the association between smoking and "sudden infant death syndrome" (SIDS) have all found that maternal smoking during pregnancy is positively associated with SIDS.[146]

2. Low birth weight

Smoking during pregnancy retards fetal growth and decreases infant birth weight.[147] Babies born to women who smoke during

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143 Meyer, Jonas, & Tonascia, Perinatal Events Associated With Maternal Smoking During Pregnancy, 103 Am. J. of Epidemiology 464-76 (1976).

144 1979 Surgeon General's Report, Ch. 8 at 47. The complications of pregnancy associated with smoking that contribute to the increased risk of perinatal death include placenta previa, abruptio placenta, bleeding during pregnancy and premature rupture of membranes. Id., Ch. 8 at 39. Smoking appears to reduce the incidence of preeclampsia during pregnancy but also to greatly increase the risk of perinatal mortality if preeclampsia does develop. Id., Ch. 8 at 41-42.

145 Id., Ch. 8 at 42.

146 Id., Ch. 8 at 44.

147 Id., Ch. 8 at 11-12.

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pregnancy weigh an average of 200 grams (about half a pound) less than babies born to comparable women who did not smoke during pregnancy.[148] This relationship has been found in almost 50 retrospective and prospective studies involving more than half a million total births.[149]

Perhaps the most significant aspect of the relationship between maternal smoking and decreased birth weight is its strong linkage to the amount of smoking during pregnancy coupled with its independence from other factors that influence birth weight. That is, there is a dose-response relationship between maternal smoking and birth weight -- the more a woman smokes during pregnancy, the greater the reduction in birth weight[150] -- and this reduction is independent of socio-economic status, race, parity (number of children), age, maternal size, maternal weight gain, or sex of the child.[151]

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148 Id., Ch. 8 at 11; 1980 Surgeon General's Report on Smoking and Women at 228.

149 1979 Surgeon General's Report, Ch. 8 at 11.

150 Id., Ch. 8 at 12.

151 Id., Ch. 8 at 12-13.

The independence of smoking from other factors that influence birth weight means that smoking during pregnancy affects all births similarly. Babies born to a woman who smokes during pregnancy will weigh an average of 200 grams less than would otherwise be expected even if the mother has no other characteristics that would be expected to reduce birth weight. Id., Ch. 8 at 14. Women who have other characteristics that would be expected to reduce their child's birth weight will reduce the child's birth weight by an additional

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Not surprisingly, babies born to smoking mothers are not only lighter, but smaller in other dimensions as well. The fetal growth retardation associated with smoking may also be seen in reduced body length, chest circumference, and head circumference.[152] One of the major studies of maternal smoking, the Ontario Perinatal Mortality study of more than 50,000 births, found that, compared to nonsmokers, women who smoke a pack or more of cigarettes a day are about 130% more likely to have a baby that weighs less than the mean of 2500 grams and smokers of less than a pack a day are about 53% more likely to have babies that weigh less than the mean.[153]

There have been several studies of the effects of smoking during pregnancy and reduced birth weight on the long term physical growth, intellectual development and behavioral characteristics of the child. Such studies are difficult to conduct because of the large

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[151] (Footnote Continued)

200 grams if they smoke during pregnancy. Id.

Although there is a clear dose-response relationship between smoking during pregnancy and reduced infant birth weight, there is some evidence that women who stop smoking by the fourth month of pregnancy have about the same risk of giving birth to a low-birth weight baby as nonsmokers. Id., Ch. 8 at 12.

[152] 1980 Surgeon General's Report on Smoking and Women at 231.

The overall reduction in size of smokers' babies cannot be explained by the greater likelihood of smokers to deliver their babies prematurely and therefore to have smaller babies. Although, as discussed above, smokers do have more preterm deliveries, smokers' babies are smaller than nonsmokers' babies when matched for time of gestation. 1979 Surgeon General's Report, Ch. 8 at 28.

[153] 1979 Surgeon General's Report, Ch. 8 at 14.

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number of factors other than maternal smoking during pregnancy that might affect the variables being studied. According to the 1979 and 1980 Surgeon General's Reports, several studies show that children whose mothers smoked during pregnancy display significant signs of retardation and growth reduction up to the age of 11 years.[154] The 1980 Report states: "These studies suggest unfavorable effects of maternal smoking during pregnancy on the child's long term growth, intellectual development, and behavioral characteristics."[155]

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[154] Id., Ch. 8 at 28. 1980 Surgeon General's Report on Women and Smoking at 237.

[155] 1980 Surgeon General's Report on Women and Smoking at 237.

Source: https://www.industrydocuments.ucsf.edu/docs/ggmk0000

G. Smoking and the Use of Birth Control Pills

The synergistic effect of smoking and the birth control pill makes the millions of women who use estrogen-containing oral contraceptives and also smoke cigarettes particularly subject to disability and death from cardiovascular diseases.[156] It is now well established that women who both smoke and use birth control pills are more likely to suffer heart attacks than would be expected by adding the separate risk factors for smoking and for contraceptive use. A woman who uses estrogen-containing birth control pills doubles the likelihood that she will suffer a myocardial infarction, or heart attack.[157] If she also smokes, her risk multiplies dramatically and she becomes ten times more likely to suffer a heart attack than a woman who neither smokes nor uses the pill.[158] Heavier smokers who use oral contraceptives face an even greater risk of heart attack, as do women in their mid-thirties and forties.[159]

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156 1979 Surgeon General's Report, Ch. 4 at 60-61. Virtually all of the birth control pills prescribed in the United States contain estrogen. IMS National Prescription Audit (1978). The most recent and complete data available indicate that in 1976 over six million women who were married or had at one time been married used birth control pills. This total does not include those women who had never been married who used birth control pills and thus probably underestimates the number of women who use oral contraceptives. Vital Health Statistics of the National Center for Health Statistics, Department of Health, Education and Welfare, Advance data (No. 36, 1978 and No. 40, 1978).

157 1979 Surgeon General's Report, Ch. 4 at 60.

158 1979 Surgeon General's Report, Ch. 4 at 60.

159 1980 Surgeon General's Report Smoking and Women at 116-17. See also, Shapiro, et al, Oral Contraceptive Use in Relation to Myocardial Infarction., The Lancet, 743-47 (1979).

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Source: https://www.industrydocuments.ucsf.edu/docs/lgdf0000

Women who smoke and use oral contraceptives also appear to increase greatly their chances of suffering one type of stroke cause by a cerebral hemorrhage. The 1979 Surgeon General's Report cites a recent study finding that oral contraceptive use by a woman who does not smoke makes her about six times more likely to develop a subarachnoid hemorrhage than a woman who neither smokes, nor takes birth control pills.[160] In contrast, women who both take oral contraceptives and smoke cigarettes are about 20 times more likely t suffer a subarachnoid hemorrhage than women who neither smoke nor take the pill.[161]

The normal incidence of heart attack and subarachnoid hemorrhage among the age group of women who ordinarily use oral contraceptives is relatively low, even with the enormous increase in risk caused by the combined use of birth control pills and cigarettes. As a result the total number of women who actually suffer from this disease is not of epidemic proportions. However, the problem is substantial enough that the Food and Drug Administration has required that the Patient Package Insert for all oral contraceptives prominently display the following statement:

> Cigarette smoking increases the risk of serious adverse effects on the heart and blood vessels from oral contraceptive use. This risk increases with age and with heavy smoking (15 or more cigarettes

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[160] 1979 Surgeon General's Report, Ch. 4 at 61.

[161] Id.

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Source: https://www.industrydocuments.ucsf.edu/docs/

per day) and is quite marked in women over 35 years of age. Women who use oral contraceptives should not smoke.[162]

As the FDA statement has concluded, women who smoke and use oral contraceptives greatly increase their risk of suffering cardiovascular diseases.

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162 21 C.F.R. § 310.51 (1980).

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H. Smoking and Addiction

After reviewing evidence regarding the compulsive use, toxicity and adverse social consequences of cigarette smoking, a panel of experts convened by the National Institute on Drug Abuse ("NIDA") concluded that "...cigarette smoking behavior should be considered a form of addiction, and tobacco in the form of cigarettes, an addicting substance."[163] The experts recommended that policies toward cigarette smoking should be "...re-examined in light of the range of policy considerations which are presently considered germane to the classic forms of drug addiction such as addiction to the narcotics, sedatives, stimulants, or alcohol."[164] Recently, the National Advisory Council on Drug Abuse adopted a policy statement formally requesting the Department of Health and Human Services to recommend that Congress require that all cigarette packages include a warning that cigarettes are addictive.[165]

In addition to the addictive biological and pharmacological effects of cigarette smoke, psychological factors play an important

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[163] National Institute on Drug Abuse of the U.S. Public Health Service, Final Report: Technical Review on Cigarette Smoking as an Addiction, ("NIDA") (1979) at 6.

The NIDA panel used the following definition of an addicting substance: "An addicting substance is one that has: (1) pharmacological properties leading to compulsive use; (2) a capability of producing organ and/or behavioral toxicity; and (3) a use pattern associated with adverse social consequences." Id., at 2.

[164] Id., at 6.

[165] National Advisory Council on Drug Abuse, Minutes of Meeting, May, 1980.

Source: https://www.industrydocuments.ucsf.edu/docs/gqnk0000

role in maintaining cigarette use, as they do for addictions to other substances.[166] Nonetheless, most experts on the psychological aspects of smoking agree with the NIDA conclusion that most cigarette smokers are in some way physically dependent on cigarettes. However, despite clear evidence that some persons can become physically dependent on tobacco smoke,[167] scientists and physicians have not yet been able to demonstrate conclusively which component or components of the smoke make it so difficult for people who want to stop smoking to actually do so. At the present time, nicotine is thought to be the primary addicting element, but more research may uncover additional addicting components in cigarettes and define nicotine's role more clearly.[168]

In evaluating the effect of nicotine many experts caution that tested nicotine levels of a cigarette may not accurately reflect the actual amount of nicotine taken in by a smoker.[169] For example,

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166 See generally 1979 Surgeon General's Report, Ch. 16 at 3-30.

167 According to the NIDA Report, "Clear signs of withdrawal appear when heavy smokers abruptly quit, although there appears to be considerable variability in its manifestation. When a smoker stops smoking suddenly, he/she frequently shows a decrease in heart rate, sometimes in blood pressure, and a decrease in excreted epinephrine and nonepinephrine and its metabolities. Other endocrinological changes may also occur. Furthermore, there is a decrease in mean EEG frequency, an increase in appetite and weight, and an impairment in performance on psychomotor tasks and in concentration. Disturbances in arousal and sleep may occur; and anxiety, irritability, and aggression increase. Finally, there is an increase in craving for smoking which decreases with time." NIDA Report, Id. at 5.

168 1979 Surgeon General's Report, Ch. 15 at 7.

169 This note of caution was echoed by both the Behavioral Science and the Pharmacology and Toxicity groups at the June 1980 Low Yield

(Continued)

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there is some evidence that smokers of low-yield cigarettes compensate for reduced nicotine by inhaling more deeply, puffing more often, smoking closer to the cigarette butt, or by covering air holes with their lips or fingers.[170] If so, smokers may be receiving more nicotine, "tar" and other substances than the cigarettes' "tar" and nicotine levels would suggest. The concerns about compensation obviously extend beyond addiction to the effects on other diseases associated with smoking.

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169 (Footnote Continued)

Cigarette Conference of distinguished scientists and physicians sponsored by the Department of Health and Human Services, Office of Smoking and Health ("Low Yield Conference"). Both groups emphasized the need for further study of smoker compensation for reduced nicotine yield. Low Yield Conference Transcript, supra at 8, 28.

170 Id.

Source: https://www.industrydocuments.ucsf.edu/docs/qgwc0000

I. Low "Tar" Cigarettes

Since the issuance of the 1964 Surgeon General's Report,[171] the average "tar" and nicotine content of cigarettes has declined. This decline was encouraged by the 1966 Public Health Service announcement that "the preponderance of scientific evidence strongly suggests that the lower the 'tar' and nicotine content of a cigarette, the less harmful [will] be the effect."[172] The F.T.C. also issued a policy statement taking this position.[173]

In the early 1970's, the cigarette companies began to promote aggressively low "tar" and nicotine cigarettes.[174] More recently, there has been a dramatic sales shift toward these cigarettes. In 1971, less than 4% of all cigarettes sold in the United States were

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171 The 1964 Surgeon General's Report identified "tar" and nicotine as the major known harmful constituents of cigarette smoke. 1964 Surgeon General's Report at 62. NOT SPECIFIC ON P. 62

172 Hearings before the Consumer Subcomm. of the Senate Comm. on Commerce, 90th Cong., 1st Sess. (1967). The Public Health Service always accompanied this statement with the caveat that the best way to prevent the hazards of smoking was not to smoke at all. Office of Smoking and Health, Department of Health and Human Services, Low Yield Conference, Transcript for June 9, 1980, at 9. The policy statement was written by Drs. E. Cuyler Hammond and Ernst Wynder. Id.

173 Id.

174 As early as the 1950's, cigarette companies advertised that certain brands were lower in "tar" and nicotine and, by implication, less dangerous. In the absence of uniform testing procedures, it was impossible to make claims about "tar" and nicotine levels that could be substantiated and, in 1960, the FTC obtained the agreement of cigarette manufacturers to stop making claims about "tar" levels.

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low "tar".[175] By 1978 28% of the domestic cigarettes sold had 15.0 mgs. or less of "tar".[176] By 1979, low "tar" cigarettes accounted for slightly less than 41% of that year's sales.[177] Ultra-low "tar" cigarettes, which have 6.0 mg. or less "tar", have substantially lower sales, accounting for less than 6% of total sales in 1979.[178]

What is the health significance of this shift in smoking behavior? By Congressional directive the entire 1981 Report of the Surgeon General is devoted to this topic.[179] As then Secretary

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[175] The FTC's Annual Report to Congress on Cigarette Advertising for the Year 1978 at 15. The FTC formally defines a low "tar" cigarette as one that has 15.0 or less milligrams of "tar". As indicated in the table in fn. 178, the informal definition of "low tar" is changing.

[176] Id.

[177] F.T.C.'s Annual Report to Congress on Cigarette Advertising for the Year 1979 (forthcoming).

[178] Id. The table below shows the 1979 domestic market share for cigarettes of the "tar" levels indicated. Id.

	Percent of Total Sales
15mg & below	40.9%
12mg & below	30.5
9mg & below	10.6
6mg & below	5.8
3mg & below	2.7

[179] Office on Smoking and Health, U.S. Department of Health and Human Services, The Health Consequences of Smoking, The Changing Cigarette, A Report of the Surgeon General (January 12, 1981) ("1981 Surgeon General's Report").

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Source: https://www.industrydocuments.ucsf.edu/docs/gqmf0000

Harris noted in transmitting the 1981 Report to Congress:

> In preparing this report, the scientists and scientific agencies of this Department have reviewed all current scientific evidence and have concluded that the search for less hazardous cigarettes has not yielded a product which can be considered "safe". The person who changes to a cigarette with lower measured yields may reduce certain hazards of smoking, but the benefits will be small compared to the benefits of quitting entirely.[180]

After viewing all of the evidence the Surgeon General concluded:

1. There is no safe cigarette and no safe level of consumption.

2. Smoking cigarettes with lower yields of "tar" and nicotine reduces the risk of lung cancer and, to some extent, improves the smoker's chance for longer life, provided there is no compensatory increase in the amount smoked. However, the benefits are minimal in comparison with giving up cigarettes entirely. The single most effective way to reduce hazards of smoking continues to be that of quitting entirely.

3. It is not clear what reductions in risk may occur in the case of diseases other than lung cancer. The evidence in the case of cardiovascular disease is too limited to warrant a conclusion, nor is there enough information on which to base a judgment in the case of chronic obstructive lung disease. In the case of smoking's effects on the fetus and newborn, there is no evidence that changing to a lower "tar" and nicotine cigarette has any effect at all on reducing risk.

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7. A final question is unresolved, whether the new cigarettes being produced today introduce new risks through their design, filtering mechanisms, tobacco ingredients, or additives. The chief concern is additives. The Public Health Service has been unable to assess the relative risks of cigarette additives

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[180] Id.,

Source: https://www.industrydocuments.ucsf.edu/docs/qgdd0000

because information was not available from manufacturers as to what these additives are.[181]

The Surgeon General further continued:

> In evaluating the public health significance of reduced risk of lung cancer, it is important to recognize that the largest component of excess mortality caused by smoking is cardiovascular disease deaths. There is not sufficient evidence to conclude that use of lower "tar" and nicotine cigarettes causes any reduction in this burden. The same is true of the other major diseases caused by cigarette smoking, most notably chronic obstructive lung disease and adverse effects on pregnancy.[182]

Given the current state of scientific knowledge, it is, therefore, necessary to proceed cautiously before concluding whether low "tar" and nicotine cigarettes are significantly less dangerous than other cigarettes. The conclusion in the 1979 Surgeon General's Report that smoking is hazardous to health is based upon a review of some 30,000 published articles and eight large prospective epidemiological studies conducted over a period of thirty years.[183] Much less research has been done on the effect of lower "tar" and nicotine cigarettes. The lack of empirical evidence of the beneficial health effects of lower "tar" and nicotine cigarettes and the need for more research on this subject is a recurrent theme emphasized throughout the 1981 Surgeon General's Report.[184]

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181 Id., at ii. VI wrong page

182 Id., at ii. VI

183 1979 Surgeon General's Report, Ch. 7 at 5. NOT ON STATED PAGE

184 1981 Surgeon General's Report, Ch. 4 at 120-121, Ch. 5 at 139, 146-148, Ch. 6 at 157, 159.

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Lack of empirical evidence is not the only reason for the need to proceed cautiously before concluding that lower "tar" and nicotine cigarettes are necessarily safer than those higher in "tar" and nicotine. Cigarette smoke contains over 2000 known compounds. In addition to "tar" and nicotine, cigarette smoke contains many other harmful substances, including such gases as carbon monoxide, hydrogen cyanide, nitrogen dioxide and volatile aromatic hydrocarbons.[185] The existence of these and other potentially harmful constituents in cigarette smoke increases the possibility that reducing the "tar" and nicotine levels without reducing the levels of these other agents will not eliminate some of the most serious health hazards of smoking.

For example, although scientists still are uncertain which agents cause heart disease, many suspect that nicotine and carbon monoxide are the critical compounds.[186] Scientists also suspect that the irritating gases in cigarette smoke may play a major role in causing chronic obstructive lung disease.[187] Although the medical evidence is not conclusive, carbon monoxide may be the most important factor in causing spontaneous abortion, still birth, neonatal death and low birthweight babies.[188] The role of numerous other possibly

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185 Id., 1979 Surgeon General's Report, Ch. 1 at 29-30; 1981 Surgeon General's Report, Ch. 2 at 33-34.

186 1979 Surgeon General's Report, Preface at xiii; 1981 Surgeon General's Report, Ch. 4 at 117-119.

187 1981 Surgeon General Report, Ch. 5 at 148-149.

188 1979 Surgeon General's Report, Ch. 8 at 57-67; 1981 Surgeon General's Report, Ch. 6 at 167-169.

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Source: https://www.industrydocuments.ucsf.edu/tobacco/docs/

toxic substances in cigarette smoke, such as cadmium and cyanide, in altering fetal growth and development also needs to be studied further.[189] The evidence thus indicates that as a result of the presence of these other ingredients in cigarette smoke a reduction of "tar" and nicotine will not necessarily eliminate all or even most of the health hazards of smoking unless the levels of the other constituents are also reduced.

There is also evidence that some of the benefits which might accrue from a reduction in "tar" and nicotine are to some unknown extent offset by two factors. First, many low "tar" cigarettes contain flavoring agents and additives to replace the flavor lost by reducing the "tar" levels.[190] The health effects of these additives and flavoring agents are not yet known and some may themselves be carcinogenic.[191]

Second, there is evidence that some smokers who switch to low "tar" cigarettes compensate for the reduced level of nicotine by a variety of methods that increase their intake of "tar" and nicotine to levels substantially above those indicated by machine testing.[192] Some smokers compensate by inhaling more often,

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189 1981 Surgeon General's Report, Ch. 6 at 167-169.

190 1979 Surgeon General's Report, Preface at xiii; 1981 Surgeon General's Report, Ch. 2 at 51-52, 55-56, 60.

191 Id.

192 Kozlowski, Frecker, Khouw, Pope, The Misuse of "Less Hazardous" Cigarettes and its Detection: Hole Blocking of Ventilated Filters. 70 American Journal of Public Health 1202-1203 (1980); 1979 Surgeon General's Report, Preface at xiii; 1981 Surgeon General's Report, Ch. 7 at 180-181.

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Source: https://www.industrydocuments.ucsf.edu/docs/ggnm0000

inhaling deeper, smoking the cigarette closer to the filter, or simply smoking more cigarettes.[193] The construction of many of the low yield cigarettes also contributes to the intake of "tar" and nicotine above the levels obtained by the FTC testing apparatus. These cigarettes have a series of tiny holes around the middle of the filter. By covering these holes with one's finger or lips, a smoker increases the level of "tar" and nicotine inhaled.[194] Although the evidence suggesting that many smokers of low "tar" and nicotine cigarettes compensate for the reduced delivery of these constituents is not conclusive, it is also not possible to conclude at this time that compensation does not occur.

Some experts believe that smokers of low "tar" and nicotine cigarettes find it easier to quit smoking altogether than do people who smoke higher "tar" and nicotine brands, although others cite evidence that low "tar" smokers do have difficulty quitting. If the former is true, switching to a low "tar" cigarette may be the first step toward stopping smoking entirely and would offer an undisputed

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193 1979 Surgeon General's Report, Appendix at 20-21; 1981 Surgeon General's Report, Ch. 7 at 180-181.

194 See Hoffman & Wynder, The Low Yield Cigarette, 70 American Journal of Public Health, 1144-46 (1980), in which the authors emphasize the need for sound scientific data on how actual "tar" and nicotine delivery relates to tested levels of "tar" and nicotine. The authors state that it is necessary to develop "low yield filter cigarettes that are less vulnerable to the smoker's manipulation of their actual smoke and nicotine deliveries." Id., at 1144.

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health benefit to those persons who used them as a step toward quitting. However, there is also some evidence that the availability of low "tar" and nicotine cigarettes makes it easier for some people to start smoking or to rationalize not quitting. Based on data indicating that teenage boys and especially teenage girls tend to smoke low "tar" brands in greater proportion than the population at large, one researcher hypothesizes that teenagers and young adults, particularly girls, find it easier to experiment with and later become habituated to low "tar" cigarettes.[195]

If this is true, it could offset the benefit gained by those who use low tar cigarettes as a first step in quitting. It should be stressed that the evidence on the use of low "tar" cigarettes as a method of quitting and the evidence that these cigarettes make it easier for some people to start smoking or to rationalize not quitting is far from conclusive.

In conclusion, the findings of the 1981 Surgeon General's Report re-enforce the cautious position taken by the Surgeon General two years earlier:

> Until these scientific and behavioral issues are resolved, there can be no final assessment of the public health benefits of our present search for less hazardous cigarettes. The preponderance of scientific evidence continues, as in 1966, to suggest that cigarettes with lower "tar" and nicotine are less hazardous. It has become clear in the years since, however, that in presenting this information to the public three caveats are in order: Consumers should be

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195 Harris, J., Public Policy Issues in the Promotion of Less Hazardous Cigarettes Banbury Report 3: A Safe Cigarette? (G. Gori & F. Bock, eds. 1980) at 333-36.

Source: https://www.industrydocuments.ucsf.edu/docs/ggmx0000

advised to consider not only levels of "tar" and nicotine but also (when the information becomes available) levels of other tobacco smoke constituents, including carbon monoxide. They should be warned that, in shifting to a less hazardous cigarette, they may in fact increase their hazard if they begin smoking more cigarettes or inhaling more deeply. And most of all, they should be cautioned that even the lowest yield of cigarettes presents health hazards very much higher than would be encountered if they smoked no cigarettes at all, and that the single most effective way to reduce the hazards associated with smoking is to quit.[196]

Two strong proponents of low "tar" and nicotine cigarettes have reached a similar conclusion.

Above all, we must not lose sight of the fact that cessation of smoking among adults and educational efforts to prevent onset of the habit among children remain the ultimate choices for eliminating the health risks associated with tobacco usage.[197]

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196 1979 Surgeon General's Report, Preface at xiv (emphasis added).

197 Hoffman & Wynder, The Low Yield Cigarette, 70 American Journal of Public Health 11, 1144-46 (1980).

Source: https://www.industrydocuments.ucsf.edu/docs/gghk0000

J. The Tobacco Industry's Position on the Health Effects of Smoking

Although the cigarette manufacturers no longer claim that cigarette smoking has affirmative health benefits, they continue to argue that it has not been proven that smoking has any detrimental health effects. The tobacco industry makes four general arguments in support of its position. They are: (1) Epidemiological evidence,[198] which establishes a correlation between smoking and the incidence of a disease, cannot be used to establish a causal link between smoking and that disease no matter how strong the epidemiological evidence. (2) Smoking cannot be identified as a cause of a particular disease without a full understanding of how that disease develops and the specific agent in cigarette smoke that leads to its development (disease etiology). (3) Unidentified individual (constitutional) differences between smokers and nonsmokers, and not smoking itself, explain why smokers suffer from certain diseases more often than nonsmokers. (4) All of the studies which have been used to establish a link between smoking and health are flawed in design or methodology.[199]

Central to the tobacco industry's position is the contention that epidemiological evidence never can be relied upon to demonstrate that smoking increases one's likelihood of developing certain

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198 See the explanation of epidemiology in Chapter I, fn. 23, supra.

199 These arguments may be found in a review of Smoking and Health, The Tobacco Institute, 1979 at 37-41. ("Smoking and Health").

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diseases.[200] The industry contends that epidemiological evidence, which relies on establishing statistical correlations between the incidence of a given disease and the presence of a suspected disease-causing agent, cannot be used by itself to establish a cause and effect relationship. However, use of epidemiological evidence to help establish a causal link between a particular agent and a particular disease represents a well accepted practice among the medical profession. In 1964 the Surgeon General considered and rejected the argument that massive epidemiological evidence cannot be used to help establish causation:

> Statistical methods cannot establish proof of a causal relationship in an association. The causal significance of an association is a matter of judgment which goes beyond any statement of statistical probability. To judge or evaluate the causal significance of the association between the attribute or agent and the disease, or effect upon health, a number of criteria must be utilized, no one of which is an all-sufficient basis for judgment. These criteria include:
>
> a) The consistency of the association
> b) The strength of the association
> c) The specificity of the association
> d) The temporal relationship of the association
> e) The coherence of the association[201]

The epidemiological evidence demonstrating the association between smoking and the diseases discussed in this report meet these criteria. The Surgeon General found that the association is consistent, strong, specific and independent of other identifiable risk

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200 Smoking and Health, supra at 41-42.

201 1964 Surgeon General's Report at 20.

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factors. For example, every major epidemiological study has shown a strong and consistent association between smoking and lung cancer.[202] Smokers do not simply develop more cases of lung cancer. With all other variables held constant, the more cigarettes they smoke, the more years they smoke or the younger they are when they start smoking, the more likely they are to develop lung cancer.[203] In addition, people who stop smoking reduce their risk of developing lung cancer.[204] This dose-response effect shown by epidemiological evidence based upon the number of cigarettes smoked, duration of smoking and age of initiation of smoking, supports the finding that there is a cause and effect relationship between smoking and lung cancer.[205] Similar dose-response relationships have also

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202 1979 Surgeon General's Report, Ch. 5 at 11.

203 Id., Ch. 5 at 31.

204 Id.

205 Id. In addition to its general argument that correlation does not establish causation, the Tobacco Institute alleges that one cannot conclude that cigarette smoking causes cancer because the following factors have not been considered critically: (1) diagnostic advances, (2) changes in reported frequencies of lung cancer cell types and (3) trends in cigarette consumption and lung cancer mortality. Smoking and Health, supra at 87.

Examining these factors does not alter the conclusion that smoking causes lung cancer. Diagnostic advances may explain why doctors are better able to identify lung cancer in all people, but they do not explain why smokers are far more likely than nonsmokers to develop lung cancer. Smoking has been linked to squamous cell carcinoma, which has been decreasing in incidence, as well as to adenocarcinoma, which has been increasing in incidence. In fact, smoking is related to the development of all four major cell-types of lung cancer in men and women. 1979 Surgeon General's Report, Ch. 5 at 23-24; 1980 Surgeon General's Report on Smoking and Women at 131.

Trends in cigarette consumption and lung cancer mortality also help establish, rather than disprove, that smoking causes lung

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male

been found between smoking and the incidence of coronary heart disease,[206] chronic obstructive lung disease,[207] perinatal death,[208] and reduced infant birth weight.[209]

In sum, the epidemiological evidence linking smoking to numerous diseases is strong and consistent. In many cases, it is corroborated by clinical and experimental evidence.[210]

The tobacco industry's second argument that scientists cannot establish causation until they fully understand the etiology of a disease is completely uncompelling. Scientists know that something about cigarette smoke causes chronic obstructive lung disease. For example, the Tobacco Institute argues that because scientists do not know exactly how smoking causes chronic obstructive lung disease, smoking cannot be called the major cause of the disease.[211] However, smokers develop the disease far more often than nonsmokers;

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205 (Footnote Continued)
cancer. For example, the lung cancer death rate among women is now rising steeply, paralleling the increase in the number of women who smoke that began after World II. 1980 Surgeon General's Report on Smoking and Women at 7.

206 1979 Surgeon General's Report, Ch. 4 at 22-25. only Table 2 includes female smokers

207 Id., Ch. 6 at 10.

208 Id., Ch. 8 at 47.

209 Id., Ch. 8 at 12.

210 Id., Ch. 4 at 40, 45-46; Ch. 5 at 29-31, 34-35, 41-42, 44, 47, 51-53; Ch. 6 at 23-24; Ch. 8 at 52-65. all these citations refer to sections on "animal Studies"

211 Smoking and Health, supra at 134.

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those who smoke more or longer get the disease more often; and those who quit smoking eliminate the acceleration of symptoms.[212] Just as physicians knew that eating limes or other citrus fruits prevented scurvy long before they knew which compound in citrus fruits actually prevented the disease or exactly how it did so, it is not necessary to know which component of cigarette smoke causes chronic obstructive lung disease, or exactly how the component affects the lung, to conclude that smoking causes emphysema and chronic bronchitis.[213] Research funded by the tobacco companies reached the same basic conclusion. Even though the etiology of chronic obstructive lung disease had not been established, the AMA-ERF Committee stated: "The Committee believes that the bulk of research sponsored by this project supports the contention that cigarette smoking plays an important role in the development of chronic obstructive pulmonary diseases ..."[214]

The tobacco industry's third argument contends that the increased incidence of various diseases among smokers might be a result of individual characteristics of the people who smoke, and not of smoking itself.[215] This "constitutional" argument alleges that the

[212] 1979 Surgeon General's Report, Ch. 6 at 9-10.

[213] Similarly, physicians were also able to prevent smallpox long before they knew exactly what the causative agent was. Low Yield Conference, Transcript for June 9, 1980 at 44; 1979 Surgeon General's Report, Ch. 5 at 31.

[214] Tobacco and Health, American Medical Association Education and Research Fund, 1978 at xiv (emphasis added).

[215] Tobacco and Health, supra at 35, 92-93; See also, Seltzer, Smoking and Coronary Heart Disease: What Are We To Believe? 100 American Heart Journal 275 (1980).

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types of people who smoke are more likely to suffer various diseases, not because they smoke, but because of underlying constitutional differences between smokers and nonsmokers. However, proponents of the constitutional argument have been unable to identify any characteristic other than smoking that accounts for the increased risk of disease faced by smokers. More important, the evidence that people who quit smoking reduce their risk of lung cancer,[216] heart attack,[217] chronic bronchitis and emphysema,[218] and low birthweight babies,[219] is fundamentally inconsistent with the constitutional differences hypothesis. If one is constitutionally more likely to suffer certain diseases, the fact that she/he quits smoking would not reduce the person's chances of developing the diseases.

The tobacco industry's fourth argument concerns the design and methodology of the studies relied upon to show the health hazards of smoking. Perhaps the most important evidence about smoking and health comes from the studies that show that smokers have higher mortality rates than nonsmokers. The tobacco industry, through the

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[216] 1979 Surgeon General's Report, Ch. 5 at 24-25.

[217] Id., Ch. 4 at 14.

[218] Id., Ch. 6 at 22-23.

[219] Id., Ch. 8 at 12.

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Source: https://www.industrydocuments.ucsf.edu/docs/gpmh0000

Tobacco Institute, has attacked the design or methodology of the major studies on which these findings are based.[220] The 1979 Surgeon General's Report examined the criticized studies and found that they were sound in design and methodology.[221] While it is necessary to examine carefully the design and methodology of any study, there have been numerous massive epidemiological studies of the health effects of smoking which have all reached the same conclusion: cigarette smoking is hazardous to health. Therefore, given the extraordinarily large number of epidemiological studies on this subject employing a wide variety of designs and methodologies which all reach the same basic conclusions, the likelihood that they are all so flawed that their conclusions are erroneous is miniscule.

While all that will eventually be known about the specific health consequences of cigarette smoking is not known now, the evidence that smoking is dangerous has grown continuously for more than the last three decades and can now only be described as overwhelming.[222] The Surgeon General, the World Health Organization, the American Medical Association, the American Heart Association, the American Cancer Society, the American Lung Association and members of the

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220 Smoking and Health, supra at 37-41.

221 1979 Surgeon General's Report, Ch. 2, fn. 25 at 43. Actuarial evidence gathered by the insurance industry corroborates the conclusion reached in the 1964 and 1979 Surgeon General's reports that smokers have higher death rates than nonsmokers.

222 Id., Preface at vii.

Source: https://www.industrydocuments.ucsf.edu/docs/ggnk0000

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insurance industry, all recognize that smoking is dangerous.[223] Even studies funded by the tobacco companies conclude that smoking increases the risk of certain diseases.[224] The four basic arguments asserted by the tobacco industry in defense of its position that smoking has not been proven to have any serious adverse health effects do not stand up to rigorous analysis.

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223 See Chapter I, Section I. A., supra.

224 Tobacco and Health, American Medical Association Education and Research Fund, 1978 at xiv.

Source: https://www.industrydocuments.ucsf.edu/docs/[illegible]

CHAPTER II: CIGARETTE ADVERTISING*

I. INTRODUCTION

This chapter will examine the type, amount and content of cigarette advertising in recent years. Cigarette advertising continues to be pervasive in American society. Although it has been prohibited from the broadcast media for the past decade, cigarette advertising has shifted to the print and outdoor advertising media to such an extent that it is a dominant force in both areas.

The purposes of the presentation of the information in this chapter relate only to concern that cigarette advertisements which do not effectively disclose the health hazards of smoking may be deceptive. This chapter reviews recent cigarette advertising to assist in an evaluation of the effectiveness of the current warning and to understand the overall advertising context in which the

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* In addition to the information in this chapter, the Commission relied upon information in confidential marketing plans and a confidential report on the results of focus groups. This information has been deleted from the version of the report released to the public.

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current warning appears and in which it must compete to effectively communicate its health message. In contrast to the current warning, cigarette advertisements present information about smoking in a highly effective manner. They communicate their message about smoking in a variety of attention-getting, frequently changing formats. The ads are rich in thematic imagery associating smoking with, among other things, outdoor activities, athletics, individualism and achievement. They are frequently filled with rugged, vigorous, attractive, healthy-looking people living energetic lives full of success and athletic achievement, free from any health hazards.

Not only are most cigarette advertisements filled with this rich, thematic imagery, many may even more strongly divert or distract attention away from the health consequences of smoking by portraying smoking as compatible with or, at least, as associated with a wide range of rigorous athletic or other strenuous activities. It is possible that these ads make it more difficult for the health warning to be effective and may further increase the possibility of deception. The impact on the efficacy of the current warning of the advertisements in which it appears was aptly summarized in an Advertising Age article describing a Christmas advertisement for Marlboro:

> A valley of snow holds a log farmhouse under a blanket of white. Smoke rises in the still air from the chimney. A lone cowboy rides his horse through the untouched virgin snow, dragging a Christmas tree by a rope....It's hard to imagine a more evocative American image, even though the

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Source: https://www.industrydocuments.ucsf.edu/docs/gqaf0000

white boxed cancer warning in the right hand corner has stained the snow yellow. The reflective pleasure of tobacco pervades the ad. It unifies the desire for a perfect Christmas with the experience of smoking. The Surgeon General has no chance against this.[1]

II. THE AMOUNT OF CIGARETTE ADVERTISING IN THE UNITED STATES

Cigarettes are the most heavily advertised product in America.[2] It has been estimated that the six major cigarette companies spent one billion dollars in 1980 to sell their product.[3] This figure is several hundred times greater than the amount government spends on public service announcements on smoking hazards.[4] The National Commission on Smoking and Public Policy reported in 1978 that the tobacco industry spent more on advertising cigarettes in one day than the (then) National Clearinghouse on Smoking and Health, the government's primary agency working in this area, spent in one year.[5]

Cigarette advertising expenditures have grown substantially over the last decade and continue to grow. Preliminary figures show that

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1 Advertising Age, December 25, 1978, at 18.

2 Leading National Advertisers, Jan.-Dec. 1979.

3 Marketing and Media Decisions, October, 1980, at 176. The six major companies are: American Tobacco, Brown & Williamson, Liggett & Myers, Lorillard, Philip Morris, and R.J. Reynolds.

4 Blum, Commentary: Medicine v. Madison Avenue, 243 Journal of the American Medical Association 739 (1980).

5 Report of the National Commission on Smoking and Public Policy to the Board of Directors, American Cancer Society, Inc., A National Dilemma: Cigarette Smoking or the Health of Americans (1978) at 9.

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Source: https://www.industrydocuments.ucsf.edu/docs/gghk0069

expenditures for 1980 ran 26% ahead of the 1979 rate.[6] The real growth in cigarette advertising between 1967 and 1979 exceeded 50%,[7] despite the passage of the Public Health Cigarette Smoking Act, which barred cigarette advertising from the broadcast media after January 1, 1971.[8]

In 1979, two of the top five advertisers in magazines in the United States were cigarette companies.[9] R.J. Reynolds was the largest single advertiser in magazines, and its expenditures included 25 million dollars spent on the promotion of just one of its many brands, Winston.[10] Philip Morris was also among the top five magazine advertisers in this country, spending close to 60 million dollars.[11] Lorillard, Brown & Williamson and American Tobacco, although spending less than the two industry leaders, were all among the top users of magazine advertising.[12]

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6 Marketing and Media Decisions, October, 1980, at 176. The figures are $121,000,000 for 1st quarter 1980, $95,982,000 for 1st quarter 1979.

7 Federal Trade Commission Bureau of Economics estimate. In deriving this estimate, the Bureau has controlled for the effects of inflation.

8 15 U.S.C. § 1331 et seq. (1970).

9 Advertising Age, September 11, 1980, at 48.

10 Marketing and Media Decisions, October, 1980, at 190.

11 Id. at 176.

12 Id.; Advertising Age, Sept. 11, 1980, at 48.

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Source: https://www.industrydocuments.ucsf.edu/docs/ggmk0000

In 1979, cigarettes also continued to be the product most heavily advertised in newspapers.[13] Lorillard's Kent was the most advertised single brand, with expenditures of over 30 million dollars.[14] Merit, manufactured by Philip Morris, was the second most advertised brand at over 26 million dollars.[15] Newspaper advertising for all cigarettes during the year increased by 28.3% over the 1978 figures.[16]

2. The tobacco industry dominates outdoor advertising even more than it does magazines and newspapers. The top five outdoor advertisers in 1979 were the five largest cigarette companies.[17] Almost half of all billboards in the United States advertise cigarettes. Moreover, R.J. Reynolds, the largest manufacturer of cigarettes, decided recently to increase substantially its billboard advertising to become the number one presence in all outdoor advertising.[18] The large and still increasing use of outdoor cigarette advertisements is especially important because the current health

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13 Marketing and Media Decisions, June, 1980, at 103-04.

14 Id.; Marketing and Media Decisions, October, 1980, at 176.

15 Marketing and Media Decisions, October, 1980, at 176.

16 Marketing and Media Decisions, June, 1980, at 103-04.

17 Advertising Age, Sept. 11, 1980, at 78.

18 Advertising Age, Sept. 22, 1980, at 110; Adweek, Sept. 15, 1980, at 1, 58.

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warning is probably least effective on a billboard. (See, infra, Appendix D.)

Transit advertising, the volume of which is not measured nationally, is also an increasingly important part of the cigarette companies' advertising program. The amount of money spent by the cigarette industry on this form of advertising increased from 5 to 22 million dollars between 1970 and 1978. The increase will be even greater in 1980 and 1981 because R.J. Reynolds is also increasing its transit budget significantly.[19]

Another form of promotion not widely used before the broadcast ban, but which has become important in recent years, is the sponsoring of music and sporting events by the cigarette companies. Notable examples of this form of advertising include the Virginia Slims tennis circuit and the Kool Newport Jazz Festival in New York. The use of discount coupons and free cigarette samples given out on street corners is another promotional technique on the rise. One source estimates that cigarette industry expenditures on this form of advertising have increased 1000 percent over the past five years.[20] For example, Brown & Williamson, in promoting a new low "tar" brand, Barclay, has been distributing free cartons of

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19 Id.

20 Blum, Commentary: Medicine v. Madison Avenue, 243 Journal of the American Medical Association 739 (1980).

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cigarettes. If this promotional technique is successful, it could cost the company up to $80 million dollars.[21]

The rise in the amount of money being spent to advertise all cigarettes over the last decade also has been accompanied by a shift in the percentage of advertising expenditures allocated to the low "tar" and nicotine market. The low "tar" market, defined as cigarettes with less than 15 mg. "tar", has increased from 2% in 1967, to 27.5% in 1978,[22] to an estimated 50% in 1980.[23] Advertising expenditures for low "tar" cigarettes have paralleled this increase, rising from 5.5% of cigarette advertising expenditures in 1967 to 48% in 1978.[24] The percentage of cigarette advertising dollars spent on low "tar" cigarette ads in 1979 was 66.9%.[25] Philip Morris is expected to spend $50 million this year alone on its new low "tar" brand, Cambridge,[26] and Brown & Williamson's competitors estimate that it will spend up to $150 million to promote Barclay.[27]

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21 Fortune, Nov. 17, 1980, at 121.

22 Table 11, FTC's Annual Report to Congress on Cigarette Advertising for the Year 1978.

23 Marketing and Media Decisions, October, 1980, at 176.

24 Table 11, FTC's Annual Report to Congress on Cigarette Advertising for the Year 1978.

25 Preliminary figures for the FTC's Annual Report to Congress on Cigarette Advertising for the Year 1979.

26 Marketing and Media Decisions, October, 1980, at 176.

27 Fortune, Nov. 17, 1980, at 121.

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Source: https://www.industrydocuments.ucsf.edu/docs/pgpf0000

III. RECENT TRENDS IN CIGARETTE ADVERTISING

The Commission's Statement of Basis and Purpose for the 1964 Cigarette Rule noted that two themes predominated in then current cigarette advertising: portrayals of the desirability of smoking and assurances about the safety of cigarettes or the relative safety of particular brands.[28]

In the ensuing sixteen years, there has been little change in the character of cigarette advertising.[29] Cigarette ads have continued to attempt to allay anxieties about the hazards of smoking and to associate smoking with good health, youthful vigor, social and professional success, and other attractive ideas, individuals and activities that are both worthy of emulation and distant from concerns relating to health. Most cigarette advertisements express at least one of these themes. Often more than one such theme can be found in a single advertisement. Thus, the cigarette is portrayed as an integral part of youth, happiness, attractiveness, personal success and an active, vigorous, strenuous lifestyle.

A Benson & Hedges campaign, for example, features young men and women engged in various athletic and outdoor activities. The slogan, "B&H, I like your style," captions pictures of a couple with

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[28] 1964 Cigarette Rule, supra, 20 Fed. Reg. at 8341.

[29] See Appendix A for a variety of cigarette ads illustrating themes discussed in this section.

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Source: https://www.industrydocuments.ucsf.edu/docs/ggnk0000

tennis rackets, a couple riding a bicycle for two, a woman with a surfboard, a woman climbing the rigging of a sailboat, a man assisting a woman who has fallen on the ski slopes, a woman driving a racing car, a man and woman roller skating, a woman carrying logs through the snow, a man riding a unicycle, a woman on snowshoes, a man and woman on horseback, a woman golfer, and a woman cross-country skier. In nearly all of these situations, involving healthy young people engaged in rigorous, athletic activity, the models are holding cigarettes. Previous Benson & Hedges campaigns have portrayed men and women sailing, fishing, surfing, skating, skiing, riding, golfing, playing baseball, and biking.

Newport ads feature couples in situations emphasizing vigor, fun and novelty. These poses include a woman on horseback in water holding hands with a man floating on raft; a couple on a beach with a trombone; a man and woman leaping over a fire hydrant; a couple on a toboggan with a dog; a woman turning a somersault in front of admirers on the beach; a man shooting a bow and arrow with a woman nestled in his arms; and a couple sliding down a slide into a pool of water. The ads exclaim: "Alive with pleasure" or "Revive your taste!"

Previous Newport campaigns have featured young people engaged in all manner of outdoor and athletic activities - football, frisbee, basketball, skiing, snorkeling, kite-flying, swimming, snowmobiling,

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and tobogganing. One Newport model rides a bicycle with a woman perched on the handlebars and a cigarette in his hand. Ads for many cigarette brands feature models in tennis outfits with rackets in hand. Advertisements for Belair cigarettes portray various kinds of beach activities.

In a related vein, a number of cigarette campaigns associate smoking with strenuous outdoor activity, and a clean, outdoor environment. One ad for Old Gold filters shows a young man with a backpack smoking a cigarette on a mountain ledge overlooking an expansive green valley. Most Salem ads feature a lake or stream, surrounded by green foliage, with snow-capped mountains in the background. The copy of one such ad reads: "Light mountain breezes. Clear rippling waters. And country fresh Salem menthol." Menthol Kool likewise advertises the taste of "menthol mist" against a backdrop of waterfalls or ocean spray.

Themes of vitality, ruggedness, strength and individualism are closely related to the images of athletic prowess described above. For example, a Camel Filters ad, declaring that "some men taste it all," features a handsome and rugged-looking young man in a life jacket, lighting up next to his raft which is beached near white water rapids, with two attractive young women in shorts looking on nearby. Another Camel Filters ad campaign presents "the Turk," a handsome young man, often surrounded by beautiful women, who is described as "one of a kind," a man who "is at home in a world few men ever see." The famous Marlboro man, galloping across the range

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on horseback or swinging a lasso, is well known for his rugged macho image. Various attractive young models in Winston advertisements claim: "I don't smoke to be like everybody else."

The original, unsuccessful campaign for low "tar" Real cigarettes, which featured a tobacco leaf and long copy discussing the brand's characteristics, was replaced by ads picturing a dune buggy racing across the sand or a jeep being driven through rapids. Inserts show the rugged-looking, powerfully-built drivers smoking cigarettes. The image projected is that of adventurous, active young smokers.

Many cigarette advertisements feature strikingly attractive and healthy young models, such as Camel's Turk and the handsome, bare-chested man and beautiful woman who have appeared in Winston ads. The use of such models associates smoking with physical attractiveness and youth. Some Winston ads imply that smoking is an activity that is begun before one "grows up." One such ad features a woman who appears to be in her twenties stating that: "Winston wasn't my first cigarette. I learned about smoking by trying different cigarettes...Winston may not be where you start. But when your taste grows up, Winston is for real." Another such ad pictures a male lumberjack who declares: "When your taste grows up, Winston out-tastes them all."

An ad for Silva Thins features a slender woman in a low-cut evening dress. The text reads: "Long, lean and low with lots of style." A Max ad, picturing an attractive model dressed in high

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fashion, urges: "Wear a Max today. Long, lean, all-white, tasteful." In More ads, on the other hand, black and white males and females assert that they are "More satisfied" because of the "style" they get from a "long, slim, brown cigarette."

A number of campaigns imply that smoking a particular brand solves the health problem or at least minimizes the risks. Vantage employs signed testimonials by smokers who claim to have considered the risks of smoking and decided not to quit smoking, but rather to switch to Vantage. The headlines say: "Smoking. Here's what I'm doing about it," or "With Vantage, I don't have as many problems with smoking."

Advertisements for brands such as Tareyton and Parliament imply that their special filters minimize the risks of smoking. For example, a recent Parliament ad claims that the cigarette's recessed filter prevents the smoker's lips from touching the "tar" that "builds up on the tip." Ads for 120mm cigarettes, such as Max and Saratoga, claim that the smoker can "enjoy smoking longer without smoking more."

An earlier True cigarette ad featured a serious-looking young woman in tennis garb, standing on a tennis court with a cigarette in hand, saying: "Considering all I'd heard, I decided to either quit or smoke True. I smoke True." This ad incorrectly implies that when the alternatives of quitting smoking or smoking a low "tar" cigarette

Source: https://www.industrydocuments.ucsf.edu/docs/ggmk0000

are weighed, the low "tar" cigarette is the healthier option.[30]

All of the above examples of cigarette advertising evidence the continuing viability of the FTC's 1964 observation that:

> ...cigarette advertising is replete with descriptions of satisfactions to be derived from smoking. These descriptions are both explicit and varied. Their constant repetition in advertising which reaches vast numbers of Americans of all ages must be viewed as significantly contributing to the portrayal of the desirability of smoking.[31]

Thus, the dominant themes of cigarette advertising are that smoking is associated with youthful vigor, good health, good looks and personal, social and professional acceptance and success, and that it is compatible with a wide range of athletic and healthful activities. One theme is conspicuously absent from all cigarette ads. Although these ads contain the required general warning, they make no mention of the numerous and specific adverse health consequences of using the advertised product.[32]

[Confidential Information Omitted]

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[30] For a discussion of the medical evidence with regard to low "tar" and nicotine cigarettes, see Ch. I, Sec. II, supra.

[31] 1964 Cigarette Rule, supra, 20 Fed. Reg. at 8342.

[32] To the best of our knowledge, cigarette companies never have provided health information, other than the required warning and "tar" and nicotine figures, in their advertisements.

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Source: https://www.industrydocuments.ucsf.edu/docs/ggnk0000

Chapter III. CONSUMER KNOWLEDGE OF THE HEALTH * HAZARDS OF SMOKING

I. INTRODUCTION AND OVERVIEW

This chapter presents the existing empirical evidence concerning consumer knowledge about the health hazards of smoking. From this data it is possible to determine the extent to which consumers are aware of or lack knowledge about the health consequences of smoking.

A. Data Relied Upon

The following chapter includes the staff's analysis of: (1) the already existing survey data of the public's knowledge of the risks of smoking, (2) two nationally projectable surveys commissioned by the F.T.C. staff designed to measure consumer knowlege in this area and (3) several studies commissioned by the staff not designed to directly measure consumer knowledge, but which nevertheless provide insight into it, such as the Walker Study and the Burke Focus Group, discussed below. In all, staff evaluated more than a dozen recent studies relevant to consumer knowledge. The most important studies are briefly described below:

Gallup Study:

This 1978 nationally projectable face-to-face opinion poll of 1500 persons surveyed smoking attitudes and behavior, and included questions concerning beliefs about the health hazards of smoking. The Gallup Opinion Index, Smoking in America, Public Attitudes and Behavior, Report No. 155, June 1978.

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* In addition to the information in this Chapter, the Commission relied upon information in two confidential nationally projectable surveys. This information has been deleted from the version of the report released to the public.

Source: https://www.industrydocuments.ucsf.edu/docs/gqnk0000

The Shor Study:

This 1980 study assessed 307 college students' perceptions and beliefs about the effects of environmental smoke and the health hazards to smokers. Shor et. al., Beliefs of Smoking and Nonsmoking College Students About the Effects of Environmental Tobacco Smoke and Related Issues, 10 J. Drug Education 274 (1980).

1978 Roper Report:

This nationally projectable survey of people's attitudes about smoking was conducted for the Tobacco Institute, and submitted to the FTC in response to a subpoena. The survey was conducted via face-to-face interviewing with 2,511 subjects. Part of the report, summarizing the results, was appended to the Commission's 1978 Report to Congress. The Roper Organization, Study of Public Attitudes Toward Cigarette Smoking and the Tobacco Industry in 1978.

Chilton Survey:

This 1979 nationally projectable telephone survey, conducted for the FTC, questioned 1,211 teenagers aged 13-18 and 407 adults aged 29-31 about their beliefs concerning the health effects of smoking. Chilton Research Services, A Survey of Adolescent and Adult Attitudes, Values Behavior, Intentions and Knowledge Related to Cigarette Smoking, 1979.

Walker Study:

This study of 805 persons, conducted for the FTC in 1980, was designed to test the ability of several new health warnings to make people think about the health hazards related to smoking. In addition, the warnings were tested for their understandability. The study provides insight into consumer knowledge through the relative ranking of proposed warnings, and more directly, through analysis of verbatim comments of subjects in the study explaining why they preferred some warnings over others. Walker Research, Health Warning Concepts Study, 1980.

Burke Study:

A 1980 focus group interview study conducted for the FTC to assess responses and attitudes towards proposed health warnings' formats, Burke also provides insight into consumer knowledge of health hazards. A focus group interview consists of small discussion groups moderated by trained professionals. The moderator then records her impressions of the discussion in an "analysis" which constitutes the results of the study. While no statistical inference may be drawn from a focus group study, it can often provide richer and more "human" insight concerning people's beliefs and attitudes than can survey data. Burke Exploratory Print Focus Group, 1980.

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HEW Teenage Smoking Study:

This study, conducted in 1979, interviewed by telephone 1,318 teens, ages 12-18, and included questions reflecting teen knowledge of the health hazards of smoking. Teenage Smoking: Immediate and Long Term Patterns, National Institute of Education, 1979.

[Confidential Information Omitted]

1980 Roper Study:

A face-to-face nationally projectable survey conducted by Roper for the FTC. Two-thousand respondents were tested for knowledge about health hazards of smoking. The field dates were November 15-22, 1980.

In reviewing this data it is important to remember that it is extremely difficult to test for consumer knowledge empirically. To some extent, test results may vary depending on the methodology employed in a particular study and the phraseology of the particular questions. General, conservative sounding statements have been found to be more likely to generate agreement than bold, direct sounding ones, even if both are true and have similar meanings.[1] Similarly, aided recall (multiple choice) questions may yield higher "correct" responses than unaided questions. In addition, there is always some element of error in any survey attributable to numerous factors, including survey design, mistaken responses, compilation errors, and the like. It may also be possible that there is a small

[1] Thus, Chilton found that 90% of the population believed that smoking has "been found to be associated" with heart attack. [Confidential Information Omitted]

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Source: https://www.industrydocuments.ucsf.edu/docs/ggnk0000

portion of those unaware of the hazards of smoking who are unreachable on the issue: that is, no matter how much information is presented to them, they will not understand that smoking is dangerous to them.[2] In short, consumer data and the methodology used always must be carefully scrutinized.

The studies discussed in this report represent a substantial body of data concerning public awareness of the hazards of cigarette smoking. The surveys cited polled more than 8,000 respondents, and asked hundreds of questions on virtually all of the many important health consequences associated with smoking. Thus, in reviewing this Chapter, it is not necesary to rely on any single study, the results of any single question or the data as it relates to consumer knowledge about just any one particular disease or health risk of smoking. Therefore, the probability of error or bias in the overall results is substantially reduced. The studies also employ a wide variety of accepted survey methodologies, which insures that the Commission need not rely on any single methodology or question-type in assessing consumer knowledge.

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[2] It is possible that some small number will continue to respond incorrectly to questions about the hazard of smoking no matter how much information is available to them. For example, some smokers may respond incorrectly because they do not want to believe or admit that they are endangering their own health. While it is not unlikely that some fall into this category, their existence or precise number is speculative and unsupported by empirical evidence. In any case, given both the large number of people who the data indicate do not know about many of the most serious health effects of smoking and the variations in the percentage of people who respond correctly depending on the health information being surveyed, this theory does not account for the major gaps in knowledge revealed by the survey data discussed in this chapter.

Source: https://www.industrydocuments.ucsf.edu/docs/ggnl0000

Moreover, a review of the results indicates that the data are consistent between studies, and, according to the 1980 Roper study of consumer knowledge, consistent along sex, race, age, socioeconomic, and geographic variables. These consistencies further suggest that the data are reliable and valid. Finally, to permit the reader to draw his or her own conclusions from the data, staff has presented the evidence in the following section in considerable detail, generally including the question asked as well as the results. In sum, the combined results of all the studies discussed in this section represent the most comprehensive evidence available of overall consumer knowledge, beliefs, and awareness of the health hazards of smoking.

B. THE RELEVANCE OF SPECIFIC HEALTH INFORMATION

Staff has proceeded in this investigation on the assumption that most people are generally aware that smoking is hazardous. To a large extent, this assumption is supported by the data. Thus, although it is clear that not every American knows smoking is hazardous--indeed, Gallup found that 24% of heavy smokers do not know or believe it is hazardous--most Americans are aware of this basic fact. However, the data also indicate that many Americans are not aware of any more specific information about smoking and health.

There are several reasons why this more specific health information is relevant to consumers. First, knowledge of more specific information is relevant to an understanding of how dangerous smoking is; i.e., what is the nature and general extent of the health

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risk of smoking. Second, knowledge of more specific information is relevant to consumers' awareness of whether the general health risks of smoking have any personal application to themselves or whether they are among those groups of people who may be uniquely vulnerable to these health hazards. Third, numerous studies demonstrate that consumers have a more difficult time remembering general or abstract information, are more likely to consider it personally irrelevant, and are less likely to consider health information at all without more specific information.

(1) Knowledge of more information about the health risks of smoking is relevant to an understanding of the general risk involved, i.e., how dangerous smoking is. Many consumers who have heard that the Surgeon General has determined that smoking is dangerous do not generally know, for example, (a) what diseases are smoking related, (b) what is the generally increased likelihood of suffering from these diseases as the result of smoking, or (c) what effect these diseases have on the likelihood of suffering a premature death.

Typically, in other situations in which consumers make decisions which affect their health, they want and are provided more specific information. For example, patients consenting to surgery are told more than the general fact that the surgery may somehow be dangerous to their health. The patient is told what the potential harmful consequences of the surgical procedure are, how likely it is that the patient will suffer from these consequences and how serious these consequences are likely to be, including how likely it is that the patient might die as a result of the surgery. Similarly, a woman who

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Source: https://www.industrydocuments.ucsf.edu/docs/gpmk0000

sees an advertisement for birth control pills or some other birth control device is told more than the fact that in some cases these pills or devices have been found to be hazardous to health. She also is informed about the specific potential health consequences. How likely is she to suffer from them? Is she within one of the categories of women who is particularly susceptible and, therefore, more likely to suffer these health consequences? She is also informed about how serious and permanent are these health consequences. In the smoking decision, as well as in these examples, some knowledge of the specific health consequences and the increased risk of the consequences from smoking is relevant to an understanding of how dangerous smoking really is.

Consumers have also indicated that they do want more information about the specific health hazards of smoking. One out of every four persons polled by Roper in the 1978 study felt they "need to know more" about smoking and health.[3] Roper also found that the majority of consumers favored a stronger, more specific warning. Eighty-two percent of the sample said they favored health warnings for cigarettes,[4] and 61% favored a new warning detailing the specific hazards associated with smoking over the current warning.[5]

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[3] 1978 Roper, q. 68.

[4] 1978 Roper, q. 9.

[5] 1978 Roper, q. 25. The statement tested was "Warning: Cigarette smoking is dangerous to health and may cause death from cancer, coronary heart disease, chronic bronchitis, pulmonary emphysema and other diseases." This warning was proposed by the FTC in the Annual

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Source: https://www.industrydocuments.ucsf.edu/docs/gmhb0000

(2) Knowledge of more information about the health hazards of smoking is relevant to consumers' awareness of whether the health risks associated with smoking have any personal application to themselves or whether they are among those people who are particularly vulnerable to these health hazards. For example, some consumers incorrectly believe that while smoking may be hazardous to others, it is not hazardous to themselves because of the particular type of cigarette they smoke or the amount they smoke. Other consumers are at special risk if they smoke, but are unaware of this fact. Included, among others, in the former group, are consumers who incorrectly believe that smoking only a few cigarettes each day is not harmful, consumers who incorrectly believe that low "tar" and nicotine cigarettes are safe, and consumers who incorrectly believe, despite the evidence indicating that smoking may be addictive, smoking is safe as long as you quit before it becomes a habit. Of particular concern in this group are teenagers who are unaware of the potentially addictive nature of cigarette smoking, and who, therefore, may be tempted to "experiment" with smoking. Included in the latter group are pregnant women, women who take birth control pills, and persons with pre-existing medical conditions which are aggravated by smoking.

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5 (Footnote Continued)

Report to Congress on Cigarette Advertising for the Year 1978. Staff tested a similar warning in the Walker study.

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Source: https://www.industrydocuments.ucsf.edu/docs/ggfk0000

(3) It is more difficult for consumers to remember and consider health information without more specific, concrete information about the health hazards of smoking. [6] Numerous studies indicate that people rely on concrete information much more than on abstract information in making judgments and decisions. Indeed, it has been shown that there is a dramatic overreliance on concrete information accompanied by a corresponding underreliance on abstact information in making decisions. Concrete information is also better remembered than abstract information. Pictures are better remembered than words, and concrete words are better remembered than abstract words. For example, the word "smoke" creates an easily remembered mental picture, whereas the word "hazardous" does not. Similarly, it has been shown that consumers are more likely to remember and consider information which they perceive as having personal implications and relevance to themselves. Specific, concrete information is much more likely to be perceived as personally relevant than abstract, general information. There is a large difference between being aware of the statement that "smoking is dangerous" and believing that "my smoking will injure me." The former is seen as an abstract statement which is difficult to interpret in terms of one's personal experiences. Thus, general knowledge that smoking is hazardous to health is much less likely to be considered personally relevant and material by consumers than knowledge of the important health hazards of smoking.

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[6] For a more detailed discussion of and citation to appropriate authorities for the facts mentioned in this paragraph, See Ch. IV, Sec. II.

Source: https://www.industrydocuments.ucsf.edu/docs/ggnm2000

Based upon an analysis of all the data reviewed in its entirety, staff has concluded that there appear to be such significant gaps in consumer knowledge that a substantial portion of the population does not know how dangerous smoking is, or whether the dangers of smoking apply to them, and, therefore, does not have an understanding of the health hazards of smoking. More specifically, the data suggest that (a) a large number of consumers do not know what diseases are related to smoking; (b) a substantial number seriously misunderstand and underestimate the extent of the increased risk of suffering these health problems as the result of smoking; (c) many seriously underestimate or are unaware of the severity of these health consequences and the increased risk of premature death from these illnesses; and (d) a significant number of consumers incorrectly do not believe that these health consequences have any personal relevance to themselves.

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Source: https://www.industrydocuments.ucsf.edu/docs/ggmk0000

II. OVERALL RISK AND REDUCTION IN LIFE EXPECTANCY

It has been almost 17 years since the Surgeon General first determined that cigarette smoking is hazardous to health. For 15 years, warnings to that effect have appeared on cigarette packages and for almost ten years, warnings have also appeared on every cigarette ad. Yet, survey data indicate that a substantial portion of people remain unaware of the serious overall health risk associated with smoking.

The data, projected nationwide, indicate that some Americans still do not even know that smoking is hazardous to health. In 1978, Gallup asked respondents whether they believed smoking was harmful to health. Although 10% of the sample did not know that smoking had any harmful effects,[7] 17% of all smokers did not know that smoking is harmful to health, and nearly one out of every four - 24% -heavy smokers did not know this fact.[8] In the 1978 Roper study, 9% of the total sample, 13% of all smokers, and 20% of two pack or more a day smokers did not know that smoking was hazardous.[9] Given that there are approximately 54 million smokers in this country, these data suggest that millions of Americans who smoke still do not know that smoking is harmful to their health.

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[7] Gallup Opinion Index, June, 1978 at 20, 21; 7% "No", 3% "Don't know."

[8] All smokers: 13% "No", 4% "Don't know"; Heavier smokers (one or more packs a day): 19% "No", 5% "Don't know."

[9] The Roper Organization, Study of Public Attitudes Toward Cigarette Smoking and the Tobacco Industry in 1978 ("1978 Roper"), g. 16. Overall: 5% "Smoking isn't hazardous", 4% "Don't know"; Smokers: 8% "Not hazardous", 5% "Don't know"; 2 pack or more a day smokers: 13% "Not hazardous, 7% "Don't know."

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Source: https://www.industrydocuments.ucsf.edu/docs/ggmk0000

More significantly, the data reveal that many consumers do not know that smoking significantly decreases a person's life expectancy, a critical fact for consumers to know in order to understand how dangerous smoking is to them. A thirty year old smoker will shorten his life on the average by between six and eight years if he smokes a pack a day.[10] However, among those polled in the 1980 Roper study, 30% of the population and 41% of the smokers did not know that a typical thirty year old male shortened his life expectancy at all by smoking.[11] Among those who did know that smoking reduces one's life expectancy, many seriously underestimated the degree to which this is true. On the average, nonsmokers underestimated this loss in life expectancy by about 2 years, while smokers underestimated it by more than four years.[12]

Similar results were obtained when respondents were asked if they thought a forty-year old man increased his risk of dying within the next year by smoking a pack a day. By smoking a pack a day, a man

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10 1979 Surgeon General's Report, Chapter 2 at 12.

11 1980 Roper, q. 30. Overall: 22% "Don't know if it's true", 6% "think it's not true," 2% "know it's not true." Smokers: 27% "Don't know if it's true", 10% "think it's not true", 4% "know it's not true."

12 1980 Roper, q. 32. Based on median score, counting those who answered "know it's not true" or "think it's not true" to screening questions as "zero", and excluding those who answered "don't know if it's true" to the screening question, as well as those who did not answer either question.

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Source: https://www.industrydocuments.ucsf.edu/docs/gghk0000

doubles his risk[13] of dying within the next year, but 44% of the sample, and 54% of smokers, did not know smoking increased at all a forty year old's risk of death within the next year.[14]

These findings are generally consistent with the findings of earlier surveys. In the 1978 Roper study, half of the people polled, and two-thirds of smokers, did not think that smoking made "a great deal of difference" in life expectancy. [Confidential Information Omitted] This evidence suggests, thus, that substantial numbers of people do not know that smoking reduces their life expectancy. The data also indicate that most people seriously underestimate the number of years one's life expectancy is reduced due to smoking, and the extent to which the risk of early death is increased by smoking.

Another way to assess knowledge of overall risk is to ask whether consumers know that smokers are more likely to get sick than nonsmokers. The responses to such a question put by Roper also

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[13] See tables in 1979 Surgeon General's Report, Ch.2, at 16-20.

[14] Roper, q. 30. Overall: 28% "Don't know if it's true"; 11% "Think it's not true"; 5% "Know it's not true." Smokers: 27% "Don't know if it's true", 18% "Think it's not true," 9% "Know it's not true."

When those who did know that there was some increased risk were asked to quantify the risk, three times as many people chose the lowest alternative - "less than 15%" - than chose the correct answer, "100% (doubles the chance)", and the median was "less than 15%."

[15] [Confidential Information Omitted]

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Source: https://www.industrydocuments.ucsf.edu/docs/gsnk0000

revealed that overall 34% of the total sample, and 50% of the smokers, thought the statement, "smokers have more of certain illness than non-smokers," was not true, or only "possibly" true.[16] These data are important because they suggest that many still falsely believe that there is a substantial controversy about the basic fact that smoking is in any way hazardous to health.

The 1978 Roper study also indicates that a great many consumers share a common misperception: they believe, incorrectly, that only heavy smoking is dangerous. Medical evidence clearly indicates that smoking only a few cigarettes a day can be harmful. Eight major studies, using age adjusted mortality ratios, showed that smokers of

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16 1978 Roper, q. 14.

IT'S BEEN SAID THAT SMOKERS HAVE MORE OF CERTAIN ILLNESSES THAN NON-SMOKERS. WOULD YOU SAY THIS IS DEFINITELY TRUE, PROBABLY TRUE, POSSIBLY TRUE, OR NOT TRUE?

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	Total	Total Smokers
Definitely	33	17
Probably	29	28
Possibly	23	30
Not True	11	20
Don't know/No answer	4	5

Moreover, of those who did feel that smokers have more illnesses, the vast majority did not feel that smoking was the major cause. Sixty-eight percent of the sample, and 85% of smokers, who felt that smokers had more of certain illnesses believed either that smoking was one of many causes, not a cause, or didn't know the reason for the excess illness. Only 32% of the sample, and 15% of smokers, felt that smoking was the major cause of excess illness in smokers. Computed from 1978 Roper, q. 15.

Source: https://www.industrydocuments.ucsf.edu/docs/ggmk0000

only 1-9 cigarettes per day increased their risk of premature death by 20 to 45%.[17] However, nearly a third of the total sample, and two-fifths of smokers, believed that "only heavy smoking is hazardous."[18] When asked what they meant by heavy, all but a handful of respondents said at least a pack a day.[19] Fifty percent of "light" smokers[20] felt that only heavy smoking is hazardous, suggesting that many people incorrectly believe that their smoking habit is not dangerous, because they do not consider themselves "heavy" smokers. Similarly, the 1980 Roper study indicates that about one out of three smokers does not know that smoking without inhaling into one's lungs is also dangerous.[21] Each of these facts suggests that substantial numbers of smoking consumers falsely believe smoking is not hazardous to them personally.

A recent study of 307 college students at the University of New Hampshire (Shor study)[22] revealed another way consumers

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[17] 1979 Surgeon General's Report, Ch. 2 at 16, Table 4.

[18] 1978 Roper, q. 16/17. 31% total, 40% smokers. See also, Teenage Smoking: Immediate and Long-Term Patterns, National Institute of Education (1979). Twenty-four percent of teenage boys and 21% of teenage girls agreed with the statement, "There's nothing wrong with smoking cigarettes if you don't smoke too many." Among teen smokers, 43% of boys and 26% of the girls agreed with this false statement.

[19] Computed from 1978 Roper, q. 16/17.

[20] Roper defined a light smoker as one who smokes 1 to 9 cigarettes per day. 1978 Roper Report and Summary at 42.

[21] 1980 Roper, q. 30. 21% "Don't know if it's true", 8% "Think it's not true", 3% "Know it's not true."

[22] Shor, et al., Beliefs of Smoking and Nonsmoking College Students

(Continued)

Source: https://www.industrydocuments.ucsf.edu/docs/gqpk0000

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underestimate the overall risk from cigarette smoking. The students were presented with the following medically accurate statement: "In industrialized nations, cigarette smoking is the greatest single cause of excess morbidity and mortality from lung and other cancers, from heart attacks, and also from emphysema in both men and women." Nearly half of the college-educated sample disbelieved the statement, or were uncertain.[23]

In sum, the data concerning the overall health risk of smoking indicate that while most consumers are aware of the general fact that smoking is hazardous, many consumers apparently do not know how dangerous smoking is and seriously underestimate the overall health risk to them from smoking. This conclusion is further supported by evidence discussed below.[24]

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22 (Footnote Continued)

About the Effects of Environmental Tobacco Smoke and Related Issues, 10 J. Drug Education 263 ("Shor") (1980).

23 Shor, q. 21. Overall, 34% were "Neutral or uncertain," 15% "Disbelieved" or "Strongly disbelieved." It is possible that some of the uncertainty expressed in response to this question may be due to the technical wording of the question.

24 A 1979 study commissioned by the FTC and conducted by Chilton Research Services, A Survey of Adolescent and Adult Attitudes, Values, Behavior, Intentions and Knowledge Related to Cigarette Smoking ("Chilton") (1979), also suggests that people greatly underestimate the relative risk of death from smoking. Respondents were asked which caused the most deaths during the last year - traffic accidents, fires, drug overdose, or cigarette smoking. The correct answer is, by far, cigarette smoking, but more than twice as many people chose traffic accidents than chose smoking. Among teens, smoking came in third, as more teens thought drug overdose was the number one killer rather than smoking. Of smokers, only 14% of teens and 17% of adults knew that cigarette smoking was the number one killer

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Source: https://www.industrydocuments.ucsf.edu/docs/ggmk0000

III. CANCER

Studies consistently indicate that cigarette smoking increases the risk for cancer of the lung, larynx, mouth, esophagus, bladder, kidney, and pancreas, leading the Surgeon General to conclude that smoking has been "implicated as a significant cause"[25] for all of these cancers. The survey data indicate that consumers evidence greater knowledge about the smoking-cancer link than about the other health hazards of smoking. However, the data also indicate that some, and perhaps many, people remain unaware of the cancer risk. In addition, the data suggest that substantial numbers of consumers who may know that smoking is related to cancer seriously underestimate the extent to which smoking increases their cancer risk and the extent to which a smoker increases his/her risk of death from cancer.

While most consumers know that smoking is linked to cancer, a number of people still do not believe the link between smoking and any type of cancer. [Confidential Information Omitted]

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[24] (Footnote Continued) among the items listed. Chilton, q. 23. See, also Chilton, q. 17, where nearly 90% of the sample underestimated the number of annual deaths caused by smoking, and more people chose the lowest alternative - 10,000 - than the correct answer (based on conservative estimates) of 300,000. See, also Slovic, Fischoff & Lichtenstein, Rating the Risks, 21 Environment 14, 20 (1979) where the authors report that the health risk from smoking was consistently underrated when subjects were asked to quantify various health risks.

[25] 1979 Surgeon General's Report, Ch. 5 at 9.

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Source: https://www.industrydocuments.ucsf.edu/docs/gpmk0000

In addition, substantial numbers of people also don't believe that smoking causes various specific cancers.

A. Lung Cancer

Medical experts agree that cigarette smoking is the major cause of lung cancer cases in both men and women.[27] In fact, it has been estimated that cigarette smoking accounts for about 85% of the lung cancer in this country.[28] Despite the evidence on this point,[29] there continues to be a substantial gap in public knowledge of the link between smoking and lung cancer. The data also indicate that smokers are more likely to have incorrect beliefs about the relationship between smoking and lung cancer than are nonsmokers.

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26 [Confidential Information Omitted]

27 1979 Surgeon General's Report, Ch. 5 at 31.

28 See, e.g., Holbrook, Tobacco Smoking, in Harrison's Principles of Internal Medicine, 960 (9th Ed. K. Isselbacher, 1980), noting that "[a]n estimated 80 percent of lung cancer cases are attributable to smoking, and are preventable." The Surgeon General estimated that out of 92,400 lung cancer deaths in 1978, about 80,000, or 88% of them were attributable to smoking. 1979 Surgeon General's Report, Secretary's Forward at ii; Ch. 5 at 10. See, also, Levin, M.L., Statement before the Committee on Commerce, U.S Senate, 89th Congress, First Session, Serial 89-5; March 23, 1965, pp. 144-148, estimating that 83.5% of all lung cancer deaths are attributable to smoking.

29 1979 Surgeon General's Report, Ch. 1 at 16.

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Source: https://www.industrydocuments.ucsf.edu/docs/gghk0000

According to the Gallup Opinion Index, June, 1978, 19% of the population do not believe that smoking causes lung cancer.[30] Gallup found a larger knowledge gap among smokers, and the largest gap among heavier smokers, whose risk for lung cancer is the greatest. Among all smokers, 28% did not believe smoking caused lung cancer while among heavier smokers,[31] nearly one-third -- 31% -- did not believe or know about the link.[32] [Confidential Information Omitted] Projected nationwide, these data suggest that tens of millions of Americans, both smokers and non-smokers, do not know that cigarette smoking causes lung cancer.

An even larger proportion do not appreciate the magnitude of the increased risk of lung cancer associated with smoking. One important fact relevant to understanding this increased risk is that smoking causes most cases of lung cancer. In fact, smoking accounts for about 85% of lung cancer cases. The 1980 Roper study found that 43% of the population, and 49% of smokers, don't know that smoking causes

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[30] Gallup Opinion Index at 22. Respondents were asked, "Do you think cigarette smoking is or is not one of the causes of lung cancer?" Eleven percent of the sample answered that smoking is not one of the causes, while another 8% said they didn't know whether it was or wasn't.

[31] Those who smoked one pack a day or more.

[32] Total smokers: 19% "Not a cause", 8% "Don't know"; Heavy smokers: 23% "Not a cause," 8% "Don't know."

[33] [Confidential Information Omitted]

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Source: https://www.industrydocuments.ucsf.edu/docs/gqnk0000

most cases of lung cancer, and 22% of the population, 27% of smokers, don't know that smoking even causes many cases of lung cancer.[34] In the Chilton study, respondents were asked, "What percent of lung cancer cases are caused by cigarette smoking?" They were presented with four choices - 10%, 35%, 50%, and - the correct answer - 85%. The results indicated that the majority of all persons underestimated, and that more smokers than nonsmokers underestimated, the percent of lung cancer cases caused by smoking. Fifty-six percent of teens and 54% of adults underestimated the percent of lung cancer cases caused by smoking, and 12% of teens and 19% of adults answered "don't know." Among smokers, 62% of the teenagers and 59% of the adults underestimated. Many people greatly underestimated the percent of lung cancer cases attributable to smoking: 27% of teenagers (30% smokers) and 28% of young adults (34% smokers) thought the correct answer was either 10 or 35%.[35]

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[34] 1980 Roper, q. 29. In this question, respondents were asked to indicate their beliefs about smoking and certain health problems, including lung cancer. They were given four choices: smoking "Does not cause the problem"; "Causes some but not many cases"; "Causes many but not most cases"; "Causes most cases." For lung cancer, 21% responded "Many but not most", 14% "Some but not many", 3% "Does not cause," 5% "Don't know." Similarly, the 1980 Roper study found that 21% of the sample, and 31% of smokers, do not know that smoking is by far the greatest cause of lung cancer. 1980 Roper, q. 30. When presented with that statement, 13% responded "Don't know if it's true," 6% "Think it's not true," 2% "Know it's not true." Smokers, 17% "Don't know if it's true", 11% "Think it's not true," 3% "Know it's not true."

[35] Chilton, q. 20.

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Source: https://www.industrydocuments.ucsf.edu/docs/gqmk0000

Since many people greatly underestimate the percent of lung cancer cases attributable to smoking, it is also likely that many people are unaware that smoking is the major cause of lung cancer. In the 1980 Roper study, 25% of all respondents failed to mention smoking when asked to name the number one cause of lung cancer.[36] In the 1978 Roper poll conducted for the tobacco industry, 51% respondents were asked whether they agreed with the following false statement: "Air pollution is the major cause of lung cancer, not cigarette smoking." Twenty-two percent of the total sample agreed with this statement; 31% of the smokers polled agreed. In addition, 28% of the total sample and 29% of the smokers answered "don't know." In other words, responses to this question indicated that 50% of the total population, and 60% of smokers, do not realize that cigarette smoking is the major cause of lung cancer.[37]

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[36] 1980 Roper, a. 27.

[37] 1978 Roper, q. 18h. The difference between the 1978 and 1980 results might be explained by the fact that persons answering the open-ended question in the 1980 study were focusing on the words "lung cancer" rather than "number one cause" in the question. Thus, those who believed smoking caused lung cancer, whether or not they knew it was the number one cause, responded "smoking." The 25% who did not respond "smoking" is consistent with the data discussed above, which indicate that approximately that percent of the population do not know that smoking causes lung cancer. Results to this question do suggest that consumer knowledge about lung cancer and smoking is not "soft" - rather, no matter how you test it, about three-fourths of the population know that smoking causes lung cancer. The 1980 Roper study suggests knowledge about all types of cancer is relatively "hard" - i.e., results between aided and unaided (open-ended) recall questions are fairly consistent - in marked contrast to consumer knowledge concerning heart attack and pregnancy, where knowledge appeared much greater in response to multiple choice questions than to open-ended ones.

Source: https://www.industrydocuments.ucsf.edu/docs/gqmf0000

A cigarette smoker is about ten times more likely to develop lung cancer than a non-smoker. The 1980 Roper study tested consumer awareness of this fact in two ways. First, it asked consumers if they knew the specific fact that smokers are ten times more likely to die of lung cancer. Twenty-three percent of the population, and 39% of smokers, did not know this fact.[38] Some of this lack of knowledge, of course, is due to the use of a specific figure -- ten times -- in the question rather than real consumer misunderstanding. However, even when the question was phrased as a general statement, "Smokers are many times more likely to develop lung cancer than non-smokers," 16% of the total sample, and 25% of the smokers, did not know it was true.[39] This evidence further indicates that many consumers underestimate their increased risk of lung cancer if they smoke.[40]

In addition to the large number of consumers who still do not know that smoking causes lung cancer, and who do not know the

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[38] 1980 Roper, q. 30. Total: 15% "Don't know if it's true," 6% "Think it's not true," 2% "Know it's not true." Smokers, 22% "Don't know if it's true," 12% "Think it's not true," 5% "Know it's not true."

[39] Total: 11% "Don't know if it's true," 4% "Think it's not true," 1% "Know it's not true." Smokers: 17% "Don't know if it's true", 6% "Think it's not true," 2% "Know it's not true."

[40] Focus group research conducted for the staff by Burke Marketing confirmed this view. Burke concluded that although "[t]he greatest danger perceived for the smoker appears to be lung cancer...these persons did not have very definite ideas of how great the danger is. They seemed unsure of how much greater the probability for contracting lung cancer was for the smoker than for the non-smoker." Exploratory Print Focus Groups, January, 1980, Burke Marketing Research Inc.

Source: https://www.industrydocuments.ucsf.edu/docs/ggmk0000

magnitude of the increased risk of lung cancer for smokers, many people do not appreciate the severity of lung cancer. Seventy percent of lung cancer patients die within one year after diagnosis, and only 10% live for five years after diagnosis.[41] Of all those who get lung cancer, 95% eventually die from it.[42]

In the Chilton study, respondents were asked "Out of every one hundred people who get lung cancer, how many die from it?"[43] In choosing between possible answers of 25%, 45%, 75%, and 95% (the correct answer), 80% of teenagers and 75% of adults underestimated the risk of death from lung cancer, while another 9% of teens and 14% of adults said they "didn't know." A large proportion of the sample greatly underestimated the correct percent: approximately one-half[44] of those questioned believed that either 25% or 45% was the correct answer.

B. Other Cancers

The data also suggest that significant numbers of people do not know that smoking causes other cancers, including cancer of the esophagus, mouth, larynx, and bladder. Smoking is a major cause of cancer of the esophagus, larynx, and mouth, and causes most cases of

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41 1979 Surgeon General's Report, Ch. 5 at 31.

42 Id.

43 Chilton, q. 24.

44 Fifty-one percent teens, 47% adults.

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Source: https://www.industrydocuments.ucsf.edu/docs/gmk00000

each of these deadly cancers.[45] In the 1980 Roper Study, however, 32% of the population, and 39% of smokers, did not know that smoking is a major cause of cancer of the mouth, larnyx, and esophagus.[46]

The Gallup Poll found that 21%[47] of the population did not know that smoking causes cancer of the esophagus. More smokers did not know about the relationship than did non-smokers: 27% of all smokers, and 30%[48] of one-pack a day or more smokers either thought that smoking did not cause throat cancer, or had no opinion.

A smaller, but still significant, if projected nationally, proportion of people are not aware of the link between smoking and cancer of the mouth. Chilton found that 18% of teens and 13% of adults did not believe that cancer of the mouth was associated with cigarette smoking.[49] A much larger percentage of the population do

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[45] See Ch. I, Sec. II, supra.

[46] 1980 Roper, q. 30. Total: 23% "Don't know if it's true", 6% "Think it's not true", 3% "Know it's not true"; Smokers: 27% "Don't know if it's true," 8% "Think it's not true", 4% "Know it's not true,"

[47] Ten percent answered "No, is not a cause"; 11% said they had no opinion. Gallup Opinion Index at 24.

[48] All smokers: 17% "No, is not a cause"; 10% "No opinion;" heavier smokers: 23% "No,....", 7% "No opinion."

[49] Chilton, q. 41c. It is worth emphasizing that Chilton asked respondents if they thought cigarette smoking "has been found to be associated" with cancer of the mouth. Since 13% of adults and 18% of teens did not know that smoking has even been found to be associated with oral cancer, it seems reasonable to assume that a larger proportion of the population is unaware that smoking causes cancer of the mouth. Indeed, the respondents who did not believe that smoking "has been found to be associated" with oral cancer presumably are not aware that there is any evidence linking smoking and oral cancer. Conversely, they need not personally be convinced that there is a

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Source: https://www.industrydocuments.ucsf.edu/docs/gpwh0000

ot know that smoking causes most cases of oral cancer. The 1980 Roper study found that 66% of the total population, and 70% of smokers, do not know that smoking causes most cases of cancer of the mouth. Moreover, 40% of the population, and 44% of smokers, did not even know that smoking causes many cases of oral cancer.[50]

Similar patterns were apparent when the 1980 Roper study tested for consumer knowledge of the relationship between smoking and cancer of the larynx. Sixty-two percent of the population, and 65% of smokers, did not know that smoking causes most cases of cancer of the larynx; 36% of the sample, and 38% of smokers, did not even know that smoking causes many cases of this disease.[51]

Studies indicate that, on the average, cigarette smokers are about twice as likely to die from cancer of the bladder as non-

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49 (Footnote Continued)
real link between smoking and oral cancer to "agree" with the statement, as long as they believe at least one study "found" such an association. In other words, the phraseology used in Chilton, "found to be associated," is likely to generate a very high percent agreement, and probably overestimates the percent of people who understand the relationship between smoking and oral cancer. The same observations hold true for the identically worded questions in Chilton concerning heart disease, bronchitis, and emphysema, 42(b)(c) and (e).

50 1980 Roper, q. 29. Total: 26% "Causes many but not most," 24% "Causes some but not many," 7% "Does not cause," 9% "Don't know." Smokers: 24% "Causes many but not most," 31% "Causes some but not many," 8% "Does not cause," 7% "Don't know".

51 1980 Roper, q. 29. Total: 26% "Many but not most," 23% "Some but not many," 5% "Does not cause," 8% "Don't know." Smokers: 27% "Many but not most," 25% "Some but not many," 5% "Does not cause," 8% "Don't know."

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Source: https://www.industrydocuments.ucsf.edu/docs/gpwk0000

smokers.[52] These studies have led the Surgeon General to conclude that bladder cancer is among those cancers caused by smoking. Yet, the overwhelming majority - 75% of adults and 62% of teens - of respondents in Chilton did not believe that cigarette smoking was associated with bladder cancer.[53]

In sum, these data suggest that while most people are generally aware that there is some relationship between smoking and cancer, substantial numbers of consumers do not know the extent to which smoking increases their risk of cancer or the extent to which smokers increase their risk of death from cancer. The data, therefore, suggest that a substantial portion of consumers do not have an understanding of their increased risk of cancer if they smoke.

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[52] 1979 Surgeon General's Report, Ch. 5 at 45.

[53] When asked, "Has cancer of the bladder been found to be associated with cigarette smoking?", only 38% of teens and 25% of adults answered "Yes" to the question, and 14% of teens and 26% of the adults said they didn't know. Chilton, q. 41(b).

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Source: https://www.industrydocuments.ucsf.edu/docs/qqdk0000

V. HEART DISEASE

Although mortality ratios are particularly high among cigarette smokers for diseases such as lung cancer and chronic obstructive lung disease, heart disease is the chief contributor to the excess mortality among cigarette smokers.[54] Smokers are, on the average, almost twice as likely to die from heart attack as are non-smokers.[55] Given the strength, consistency, predictive ability, and other characteristics of the association between smoking and heart disease, the Surgeon General has concluded that "smoking is causally related to coronary heart disease in the common-sense of that idea and for purposes of preventive medicine."[56] On the basis of these studies, smoking has been identified as one of the three major causes of coronary heart disease.[57]

However, according to survey data, many people remain uninformed about the relationship between smoking and heart disease. In the 1978 Gallup study, about one out of three - 32% - did not know that smoking caused heart disease.[58] Among smokers, 37%[59] did not

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[54] 1979 Surgeon General's Report, Ch. 1 at 12.

[55] See, e.g., Hammond and Horn, 1958, who report a risk factor for all smokers of 1.70 (non-smokers=1.00); Doyle et al, 1964, report a risk factor for all smokers of 2.40. 1979 Surgeon General's Report, Ch. 4 at 22.

[56] 1979 Surgeon General's Report, Ch. 4 at 66.

[57] 1979 Surgeon General's Report, Ch. 4 at 21.

[58] Gallup Opinion Index at 25. Respondents were asked if they thought that cigarette smoking "Is or is not" one of the causes of heart disease. Seventeen percent answered "is not", 15% answered "Don't know."

[59] 25% "Is not," 12% "Don't Know."

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Source: https://www.industrydocuments.ucsf.edu/docs/gqmk0000

know about the relationship; and, among heavier smokers (pack or more a day) 40%[60] did not know about the causal link. If projected nationally, these data suggest that over 50 million American adults, and over 20 million smokers, do not know that smoking causes heart disease.

Comparable gaps in consumer knowledge concerning the relationship between smoking and heart disease are evident in [Confidential Information Omitted] the Chilton study commissioned by the FTC staff, and the 1980 Roper study. [Confidential Information Omitted] While smoking doubles a person's heart attack risk, the 1980 Roper study found that 25% of the population, and 31% of smokers, did not know that smoking greatly increased their risk of heart attack.[62]

In Chilton, respondents were asked whether they thought the following correct statement was true or false: "Cigarette smoking is

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60 29% "Is not," 11% "Don't know."

61 [Confidential Information Omitted]

62 1980 Roper, q. 30. Total: 17% "Don't know if it's true," 7% "Think it's not true," 1% "Know it's not true"; Smokers: 17% "Don't know if it's true," 12% "Think it's not true," 2% "Don't know if it's true."

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Source: https://www.industrydocuments.ucsf.edu/docs/gqbk0000

a major cause of heart disease." Twenty-seven percent of teens and 40% of adults responded either "false" or "don't know."[63] Once again, the gap in knowledge was greater among smokers: 33% of teenage smokers and 45% of adult smokers answered "false" or "don't know."[64] The 1980 Roper study found that 53% of the population and 58% of smokers do not know that smoking causes <u>many</u> cases of heart attack, and 20% of the population, 22% of smokers, do not even know that it causes <u>some</u> cases.[65]

In sum, the data support the conclusion reached by Burke Marketing Research, Inc., on the basis of focus group interviews, that, in terms of consumer knowledge, "[h]eart and circulatory

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[63] Teens: 24% "False," 3% "Don't know;" Adults: 30% "False," 10% "Don't know." Chilton, q. 52.

[64] Teens: 32% "False", 1% "Don't know;" Adults: 33% "False," 12% "Don't know."

Chilton also asked respondents whether heart disease has "been found to be associated with cigarette smoking." About 10% of respondents would not agree even with this conservative statement concerning the relationship of smoking and heart disease.

[65] 1980 Roper, q. 29. Total: 33% "Some but not many", 12% "Does not cause", 8% "Don't know. Smokers: 36% "Some but not many", 14% "Does not cause", 8% "Don't know.

Similar findings, in a smaller study, were reported by Koslowsky & Croog, <u>Perception of the Etiology of Illness: Causal Attributions in a Heart Patient Population</u>, 47 Perceptual and Motor Skills 475-78 (1978). Three hundred forty-five heart patients were presented with 16 perceived causes that are common explanations for heart disease. Respondents were asked whether they believed each listed cause was a "very important", "important", or "not important" cause of heart attack. Forty-one percent of the sample said either that cigarette smoking was not an important cause of heart attack, or answered "Don't know."

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Source: https://www.industrydocuments.ucsf.edu/docs/gqgk0000

problems are apparently not strongly associated with smoking yet."[66] The data suggesting that tens of millions of Americans are unaware of the leading cause of smoking-related death is consistent between several studies employing varied research methods and represents one of the major findings of this report concerning consumer knowledge.

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[66] Burke Exploratory Print Focus Groups (1980) at 1. Answers to an open-ended question in the 1980 Roper study also suggest that consumer knowledge of the heart attack-smoking relationship is "soft" - i.e., many consumers "know" about the relationship only in the context of aided recall (multiple choice) questions. About two-thirds of the sample did not respond "smoking" when asked to name all the causes they could think of for heart attack. 1980 Roper, q. 28. As only about one-third of the population doesn't know smoking causes heart attack when measured for aided recall, the data suggest about one-third of the sample know smoking causes heart attack with a relatively high level of awareness, one-third know it, but only with a low and perhaps ineffective level of awareness, and one-third don't know that smoking causes heart attack at any level of awareness. It is legitimate to ask whether consumers with a low-level of awareness, as discussed above, have an understanding of the risk of heart attack from smoking.

Source: https://www.industrydocuments.ucsf.edu/docs/ggdb0000

V. CHRONIC OBSTRUCTIVE LUNG DISEASE

Smoking is the single most important cause of chronic obstructive lung disease (COLD).[67] Smokers suffer a greatly increased risk for all types of COLD, including chronic bronchitis and emphysema.[68] The evidence indicates that smoking causes about 70% of all cases of chronic obstructive lung disease.

In Chilton, 18% of teens and 13% of adults did not know that chronic bronchitis "has been found to be associated" with smoking.[69] Twenty percent of teens and 9% of adults did not believe the statement for emphysema.[70]

While the majority of people know that smoking is related to these diseases, significant percentages don't know the magnitude of the increased risk. According to the 1980 Roper study, 59% of the population, and 63% of smokers, do not know that smoking causes most cases of emphysema, while 34%, and 39% of smokers, do not know

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[67] 1979 Surgeon General's Report, Ch. 6 at 7.

[68] Id.

[69] Chilton, q. 42(b). Teens: 11% "No", 7% "Don't know"; Adults: 9% "No", 4% "Don't know". [Confidential Information Omitted]

[70] Chilton, q. 42(c). Teens: 12% "No", 8% "Don't know"; Adults: 5% "No" 4% "Don't know".

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smoking causes many cases.[71] For chronic bronchitis, consumer knowledge was even lower.[72]

Experts estimate that about 30% of smokers in this country will suffer from chronic bronchitis. When this fact was presented as a proposed warning in the Walker research, many people tested expressed surprise, and appeared impressed. For example, one respondent said the warning "presents a startling fact";[73] another said the 30% figure "catches your attention".[74] Many other respondents made comments suggesting that they were both unaware of and impressed by this fact.[75] In sum, the data suggest many people do not know the

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[71] 1980 Roper, q. 29. Total: 26% "Many but not most", 19% "Some but not many", 7% "Not a cause", 8% "Don't know". Smokers: 25% "Many but not most", 24% "Some but not many," 8% "Not a cause", 7% "Don't know".

[72] 1980 Roper, q. 29. Eighty-two percent of the population did not know that smoking causes most cases of chronic bronchitis, and 85% of smokers did not know it. Fifty-five percent, 60% of smokers, did not know it caused many cases. As bronchitis and emphysema are clinically indistinguishable, however, this greater lack of knowledge for chronic bronchitis may not be very significant.

[73] Subject #0520.

[74] Subject #0643.

[75] E.g., subject #0560, 0086, 0145, 0295.

In the 1980 Roper study, q. 32, subjects were presented with the statement "At least 30% of smokers will suffer from chronic bronchitis." Eleven percent of the sample and 17% of smokers said they knew or thought this was not true, while another 36% total, 37% smokers, said they did not know whether it was true.

Responses to a question in Chilton further support the view that many people are not aware of the extent of danger of lung disease from cigarette smoking. The question asked whether respondents believed the following false statement: "Air pollution is more unhealthy for your lungs than smoking cigarettes." Chilton, q. 54.

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Source: https://www.industrydocuments.ucsf.edu/docs/gmnb0000

extent to which smoking increases their risk of chronic obstructive lung disease.

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75 (Footnote Continued)

Although the Surgeon General has determined cigarette smoking is "by far more important in producing respiratory disease" than air pollution, about one-quarter of all those asked, and one-third of the smokers asked, thought the above statement was true. Among adult smokers, fully 45% responded either "true" or "don't know" to this question, suggesting a significant level of misperception among those most likely to be suffering from respiratory disease.

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Source: https://www.industrydocuments.ucsf.edu/docs/gmtc0000

VI. PREGNANCY AND HEALTH

A woman who smokes during pregnancy risks her own health, and that of her unborn child. Studies show that maternal smoking during pregnancy significantly increases the risk of miscarriage, stillbirth, and neonatal death, and leads to significantly smaller average birth weight.[76] However, a large percentage of people, particularly among those who smoke, are not aware of the serious consequences of maternal smoking during pregnancy.

In the 1980 Roper study, respondents were presented with the statement: "If a woman smokes during pregnancy, she significantly increases her risk of losing the baby before or during birth." Nearly one-half of the women polled -- 47% -- did not know of this fact.[77] In addition, the 1980 Roper study suggests that many of those who "know" this fact for purposes of an aided recall question have a relatively low level of awareness of the fact. When asked to name as many causes as they could think of for miscarriage and stillbirth, only 12% of the women polled volunteered "smoking."

A series of questions to test consumer knowledge in this area was also included in Chilton. First, respondents were asked whether maternal smoking during pregnancy had any effect on the baby. Next, those respondents who did believe smoking had an effect were asked specific questions about the relationship between smoking and miscarriage and stillbirth.

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[76] 1980 Surgeon General's Report on Smoking and Women at 224.

[77] 1980 Roper, q. 30. 29% "Don't know if it's true," 13% "Think it's not true," 5% "Know it's not true."

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Source: https://www.industrydocuments.ucsf.edu/docs/pml0000

The results indicate that a small -- but significant if projected nationwide -- percent of the sample believed that maternal smoking during pregnancy had absolutely no effect on the baby: Ten percent of the total sample responded "No" or "Don't Know" when asked if maternal smoking had any effect on the fetus.[78]

When tested for knowledge of the specific relationships between smoking and miscarriage and stillbirth, consumers evidenced much larger knowledge gaps. In Chilton, 31% of all teenagers and 38% of all adults did not know or did not believe that a woman is more likely to have a miscarriage if she smokes during the last five months of pregnancy.[79] As an additional 10% of the sample did not think that maternal smoking had any effect on the baby (and thus were not asked this question on miscarriage), Chilton indicates that 41% of teens and 48% of adults do not know about the risk of miscarriage from maternal smoking. The knowledge gap among smokers was even

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[78] Overall: 6% "No", 4% "Don't know". Chilton, q. 39. Smokers were more likely to doubt that smoking had any effect, and considerably more likely to believe that it didn't. Ten percent of teenage smokers and 9% of adults smokers answered "No" to the question, compared to 5% of non-smokers in each group. Twelve percent of teens smokers and 13% of adult smokers answered "No" or "Don't know" to the question, compared to 10% of teenaged nonsmokers and 9% of adult nonsmokers.

[79] Chilton, q. 40(a). Teens: 24% "No", 7% "Don't know" Adults: 21% "No" and 17% "Don't know".

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greater: 52% of teenage smokers and 58% of adult smokers evidenced a lack of knowledge of this health consequence.[80]

Chilton indicates that a similar pattern of consumer misperception exists concerning the relationship between smoking and stillbirth. Among all teens, 44% did not know that smoking during pregnancy increases the risk of stillbirth; among adults, 48% did not know about the link.[81] As was the case for the relationship between smoking and miscarriage, smokers revealed a greater gap in knowledge than nonsmokers of the serious risk of stillbirth associated with maternal smoking during pregnancy. Forty-nine percent of teenage smokers doubted that maternal smoking increased the risk of stillbirth, while 57% of adults did not believe or know about the risk.[82]

In the Shor study at the University of New Hampshire,[83] 307 college students were asked a series of questions concerning the effects of smoking on pregnancy and infant health. Respondents were requested to rate statements according to the following scale: strongly believe, believe, neutral or uncertain, disbelieve, and

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80 Teens: 32% "No", 8% "Don't know", 12%, maternal smoking does not have any effect. Adults: 27% "No", 18% "Don't know", 13% maternal smoking does not have any effect.

81 Teens: 24% "No", 10% "Don't know", 10% maternal smoking does not have any effect; Adults: 23% "No", 16% "Don't know, 10%, maternal smoking does not have any effect. Chilton, q. 39, 40(d).

82 Teens: 27% "No", 10% "Don't know", 12% maternal smoking does not have any effect. Adults: 26% "No", 18% "Don't know", 13% maternal smoking does not have any effect. Chilton, q. 39, 40d.

83 Shor, supra at 269.

Source: https://www.industrydocuments.ucsf.edu/docs/ggnh0000

strongly disbelieve.[84] When presented with facts concerning the health hazards to the fetus from maternal smoking during pregnancy, large proportions of this college-educated sample evidenced uncertainty or disbelief. Women who smoke during pregnancy have a significantly increased risk of spontaneous abortion or miscarriage.[85] When presented with this statement, 25% of the college students said they disbelieved it,[86] while another 48% said they were neutral or uncertain. In other words, almost three-fourths of the sample - 73% - did not know this fact.

Medical research demonstrates that babies of mothers who smoke are more likely to die within the first month after birth than babies of mothers who do not smoke.[87] About two-thirds of the college students questioned and three-quarters of the smokers did not believe or were uncertain about this fact.[88] Among smokers, 77% did not

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84 A modified version of this methodology was employed as part of the 1980 Roper study.

85 1979 Surgeon General's Report, Ch. 8 at 32-35; 1980 Surgeon General's Report on Smoking and Women at 253.

86 Twenty-three percent "Disbelieve", 2% "Strongly disbelieve". Shor, q. 25. The statement presented respondents was "Pregnant women who smoke have increased incidence of spontaneous abortion in comparison to nonsmokers."

87 1979 Surgeon General's Report, Ch. 8 at 41; 1980 Surgeon General's Report on Smoking and Women at 253.

88 "Babies of smoking mothers have increased neonatal mortality (death within the first 28 days) in comparison to babies of non-smoking mothers." Shor, q. 24. Twenty percent of the sample disbelieved the statement, and 47% were neutral or uncertain, yielding a total of 67% doubting the fact.

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Source: https://www.industrydocuments.ucsf.edu/

know about this increased risk of neonatal death for infants of smokers.[89]

The Shor study also suggests that the majority of college students may be unaware that women who smoke during pregnancy on the average have smaller babies. When presented with this fact, 62% of the sample, and 67% of the smokers, indicated doubt or disbelief.[90]

The Shor study relied solely on a sample of college students, and its results are therefore not generalizable to the larger population of all consumers.[91] Thus, it is possible that the results in the Shor study would vary somewhat if a more representative sample were used.[92] In any event, the Shor study is supplemented by and

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[89] Twenty-five percent "Disbelieve", 52% "Neutral or uncertain".

[90] Shor, q. 9. Overall: 21% "Disbelieve", 4% "Strongly disbelieve", 37% "Neutral or uncertain"; Smokers, 21% "Disbelieve", 7% "Strongly disbelieve" 39% "Neutral or uncertain." Evidence indicates that babies born to women who smoke during pregnancy are, on the average, 200 grams lighter than babies born to comparable women who do not smoke. 1980 Surgeon General's Report on Smoking and Women at 224.

[91] The authors acknowledge this in Shor, supra at 274.

[92] It is unclear what effect this sampling bias had, if any, on the results in Shor. On the one hand, it could be assumed that college students have greater knowledge than the general public in most areas and the bias here, if any, would result in an overestimation of the knowledge among the general public. The Commission has in the past assumed that college students are likely to have more knowledge than members of the general public. Elliot Knitwear, 59 F.T.C. 893 (1961). On the other hand, it could be argued that college-aged women, most of whom have never gone through a pregnancy themselves, are likely to have less knowledge of the danger of maternal smoking during pregnancy than older women. It is worth noting, however, that in the 1980 Roper study, women in the 18-29 year age group,

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(sistent with the nationally projectable data available. The combined results of the 1980 Roper study, the Chilton study, and the Shor study represent one of the important findings of this report -- that a very substantial number of consumers, both men and women, do not know of the danger to the fetus and infant from maternal smoking.

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92 (Footnote Continued)

presumably including most college students, evidenced more knowledge on these issues than women in older age groups.

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VII. OTHER SMOKING-RELATED ISSUES

In each of the major medical areas discussed above, the data indicate significant gaps in consumer knowledge of the health hazards of smoking. In addition to these major medical areas, staff has analyzed data concerning consumer knowledge of several other areas. These areas are: the addictive nature of cigarette smoking; the presence of carbon monoxide in cigarette smoke; the relative safety of low "tar" and nicotine cigarettes; and the relationship between birth control pills, smoking, and heart attack.

A. Addiction

Many experts classify cigarettes as an addictive substance, as they do substances like narcotics, stimulants, sedatives or alcohol. This fact may be particularly important to non-smokers, especially teenage nonsmokers,[93] who may be considering whether to "experiment" with cigarettes. Evidence from Roper indicates that the majority of people do not think smoking is addictive. Half of the population felt smoking was merely a habit, and not an addiction;[94]

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[93] Evidence indicates that many teens believe cigarette smoking is "okay if they quit before it becomes a habit," and based on that belief, experiment with smoking. Teenage Smoking: Immediate and Long-Term Patterns, supra at 23, found that three out of five agreed with the above statement. Data show, however, that the vast majority of smokers who smoke as an experiment become regular users. If teens truly understood the addictive nature of cigarettes, they might be much more reluctant to 'experiment' with smoking.

[94] 1978 Roper, q. 32.

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nearly half (49%) of all nonsmokers expressed doubt that smoking was addictive.[95]

B. Carbon Monoxide

Many researchers now believe that carbon monoxide may be one of the most harmful ingredients of the more than 2,000 known ingredients in cigarette smoke. CO is the substance in cigarette smoke which many medical experts believe to be most dangerous to fetal and infant health. In addition, many experts believe CO is the agent most likely to be responsible for the increased risk of heart disease among smokers.[96] Yet, the Chilton study reveals that many people are unaware that cigarette smoke contains carbon monoxide. When asked, "Does cigarette smoke contain carbon monoxide?", 51% of teens and 45% of adults either thought it did not or did not know.[97] Similar results were obtained by Roper in the 1980 study, where 53% of the sample and 56% of smokers did not know that "Cigarette smoke contains carbon monoxide, which is a dangerous gas."[98]

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[95] Forty-five percent said it was merely a habit; 1% felt it was neither a habit nor an addiction; and 3% answered "Don't know." 1978 Roper, q. 32. [Confidential Information Omitted]

[96] See, Ch. I, Sec. II, supra.

[97] Chilton, q. 43. Teens: 29% "No," 21% "Don't know"; Adults: 19% "No", 26% "Don't know."

[98] 1980 Roper, q. 30. Total: 31% "Don't know if it's true," 13% "Think it's not true", 10% "Know it's not true". Smokers: 24% "Don't know if it's true", 19% "Think it's not true", 13% "Know it's not true."

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C. Low "Tar" And Nicotine Cigarettes

"Tar" and nicotine are among the most harmful ingredients in cigarettes. However, they are not the only harmful ingredients. The 1979 and 1981 Surgeon General's Reports both conclude that there is insufficient evidence to conclude that smoking low "tar" and nicotine cigarettes is safe, or even significantly safer than regular cigarettes.[99]

In the 1980 Roper study, respondents were presented with the following false statement: "It has been proven that smoking low-tar, low-nicotine cigarettes does not significantly increase a person's risk of disease over that of a nonsmoker." More than one out of three -- 36% -- of smokers said they knew or thought this was true, while another 32% of the smokers said they didn't know if it was true or not.[100] This evidence suggests that many smokers falsely believe that smoking is not dangerous to them if they smoke low-"tar" and low-nicotine cigarettes.[101]

D. Birth Control Pills

Smoking is especially dangerous for women who also take birth control pills. Smoking, alone, doubles the risk of heart attack over that of non-smokers. Studies have also found that the risk of heart attack among women during child bearing age is approximately doubled

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99 See, Ch. I, Sec. II, supra; 1981 Surgeon General's Report.

100 1980 Roper, q. 30. 9% "Know it's true", 27% "Think it's true."

101 [Confidential Information Omitted]

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Source: https://www.industrydocuments.ucsf.edu/tobacco/

by the use of estrogen containing oral contraceptives. However, women who smoke and take the pill have approximately ten times the risk of heart attack than that of women who do neither.[102] In Chilton, respondents were asked whether the following statement was true: "If a woman smokes and uses birth control pills, it doesn't increase her chances of getting a heart attack." Twenty-six percent of teens and 30% of adults either believed this false statement, or answered "don't know".[103] Smokers evidenced a greater lack of knowledge in this area than non-smokers. Thirty percent of teenage smokers and 36% of adult smokers were unable to answer the question correctly.[104]

Consumer knowledge in this area was further tested in the 1980 Roper study. Respondents were presented with the statement: "A woman who takes birth control pills further increases her risk of getting a heart attack if she also smokes." Thirty-six percent of the women polled did not know this fact.[105] These data constitute another

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[102] 1980 Surgeon General's Report on Smoking and Women at 114-116; 1979 Surgeon General's report, Ch. 4 at 60.

[103] Teens: 17% "True", 9% "Don't know"; Adults: 14% "True", 16% "Don't know." Chilton, q. 53.

[104] Teens: 18% "True," 12% "Don't know", Adults: 17% "True", 19% "Don't know."

[105] 1980 Roper, q. 30. 28% "Don't know if it's true", 6% "Think it's not true," 2% "Know it's not true." Respondents who did know of the risk were then asked to quantify the risk. Respondents were asked how much more likely a woman who smokes and takes birth control pills is to have a heart attack than one who does neither. One sample was given the choices: (1) less than twice as likely (2) twice as likely (3) five times as likely (4) ten times as likely (the

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important finding of Chilton and Roper: consumer knowledge of the relationship between smoking, birth control pills, and heart attack is low.

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105 (Footnote Continued)

correct answer), and (5) twenty times as likely. The vast majority of respondents underestimated the risk, and the response most often given was "twice as likely". To test for bias from choice order and from the choices presented, a separate sample was given these choices: (1) five times (2) ten times (3) twenty times (4) thirty times (5) fifty times. Predictably, more people chose the correct answer in this sample than in the other one. However, even given these choices the response most often given was the lowest - "five times" - and more than twice as many respondents underestimated the risk than overestimated. 1980 Roper, q. 32.

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VIII CONCLUSION

The data indicate serious, significant gaps in consumer knowledge of the hazards of cigarette smoking. While most people know that smoking is somehow hazardous to health, substantial numbers of people evidence a considerable gap in knowledge concerning the overall impact of smoking on the risk of dying and illness. For the substantial number of people who have only a vague general awareness of the hazards of smoking without knowing the specific hazards and risks, the following 1964 conclusion of the Commission is worth reconsidering:

> ...[T]he argument that everyone is aware of the health hazards of smoking fails to take adequate account of the existence of different levels of awareness. To be remotely or dimly aware of a subject is not the equivalent of having the kind of knowlege upon which people normally act. Much of the publicity concerning the health implications of cigarette smoking is mere hear-say. Many people are aware that it has been said that smoking is harmful; but this is not the same as knowing that smoking is harmful.
> 1964 Cigarette Rule, supra at 8360 (emphasis added).

In fact, the data discussed in this chapter suggest that many consumers do not know enough about the health effects of smoking to know how dangerous smoking is.

The results, discussed in detail above, indicate that many are unaware of the existence of the relationship between smoking and some of its most serious and widespread health consequencs, such as heart disease -- the number one cause of smoking-related deaths -- and miscarriage and stillbirth. As the data indicate, over 30% of the public is unaware of the relationship between smoking and heart disease. Nearly 50% of all women do not know that smoking during

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pregnancy increases the risk of stillbirth and miscarriage. Approximately 30% of those polled do not know about the relationship between smoking, birth control pills and the risk of heart attack. Some of the health consequences of smoking, such as lung cancer and emphysema, are more well known. However, even for lung cancer, the most well known health effect, some substantial gaps in consumer knowledge are evident.

The data also indicate that substantial numbers seriously misunderstand and underestimate the increased risk of suffering these health problems as the result of smoking. For example, although 80 to 85% of all lung cancer cases are smoking-related and a smoker is about ten times as likely to develop lung cancer as a non-smoker is, the survey data discussed in this chapter indicate that over 40% of those polled did not know that smoking caused most cases of lung cancer and nearly one-quarter of those polled did not even know it causes many cases. Similarly, although the evidence indicates that smoking causes about 70% of all cases of chronic obstructive lung disease (emphysema and chronic bronchitis), approximately 60% of the public does not know that most cases of emphysema are smoking-related, and one-third of those polled are even unaware that many cases of emphysema are smoking-related. In addition, over 50% of the population does not know that smoking causes many as opposed to just a few cases of heart attack.

As the evidence in the section on "Overall Risk" demonstrates, many more consumers seriously underestimate the severity or increased risk of dying from these smoking-related illnesses. Among those

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polled in the 1980 Roper study, 30% of the population and 41% of the smokers did not know that a typical thirty-year old male shortened his life expectancy at all by smoking. Approximately one-half of those polled greatly underestimated the risk of death from lung cancer by selecting responses indicating that they believed that substantially fewer than one-half of those who suffer from lung cancer die from the disease.

Finally, the survey data indicate that a large number of people do not believe that the health consequences of smoking have personal relevance to themselves. Thus, although the medical evidence clearly indicates that smoking only a few cigarettes a day can be harmful, nearly one-third of those polled and 40% of smokers polled believed that only heavy smoking is dangerous. Similarly, although the Surgeon General has concluded that low "tar" cigarettes have not been shown to be safe, over one-third of the smokers polled falsely believe that it has been proven that by smoking low "tar" cigarettes, smokers do not significantly increase their health risks over nonsmokers. Thus, many smokers who do not consider themselves to be "heavy" smokers and many who believe that low "tar" cigarettes are safe incorrectly believe that the health risks associated with smoking do not apply to them. Another example may be particularly important for nonsmokers, especially young people deciding whether to experiment with smoking. Although many experts now classify cigarettes as an addictive substance, many teenagers believe smoking is okay if they quit before it becomes a habit and approximately 50% of all those polled did not know that smoking is addictive for many people.

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Source: https://www.industrydocuments.ucsf.edu/docs/ggdk0000

In conclusion, the data discussed above indicate that a substantial portion of consumers do not understand the health hazards of smoking.

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CHAPTER IV. ROLE OF THE FEDERAL TRADE COMMISSION*

I. CIGARETTE ADVERTISING HAS LONG BEEN A CONCERN OF THE FEDERAL TRADE COMMISSION

Cigarette advertising has been a major concern of the Federal Trade Commission since it began examining cigarette advertising in the late 1930's. The Commission's first actions sought to prevent cigarette companies from making unsupported claims about the medical and other benefits of particular brands.[1] Between 1945 and 1960, the Commission issued seven cease and desist orders prohibiting various false claims in cigarette advertising.[2] In 1955,

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* In addition to the information in this Chapter, the Commission relied upon information in a confidential report evaluating the readership of cigarette advertisements, a confidential copy test, and two surveys. This information, which was provided by the cigarette companies pursuant to subpoena has been deleted from the version of the report released to the public.

[1] E.g., Julep Tobacco Co., 27 F.T.C. 1637 (1938); Green River Tobacco Co., 27 F.T.C. 1547 (1938).

[2] R. L. Swain Tobacco Co., 41 F.T.C. 312 (1945); P. Lorillard Co., 46 F.T.C. 735, order modified, 46 F.T.C. 853, aff'd, 186 F.2d 52 (4th Cir. 1950); R. J. Reynolds Tobacco Co., 46 F.T.C. 706 (1950), modified, 192 F.2d 535 (7th Cir. 1951), on remand, 48 F.T.C. 682 (1952); American Tobacco Co., 47 F.T.C. 1393 (1951); Philip Morris & Co., Ltd., 49 F.T.C. 703 (1952), vacated and remanded on motion of Commission, complaint dismissed on affidavit of abandonment, 51 F.T.C. 857 (1955); Liggett & Myers Tobacco Co., preliminary injunction denied, 108 F. Supp. 573 (S.D.N.Y. 1952), aff'd mem., 203 F.2d 955 (2d Cir. 1953), decision of Commission, 55 F.T.C. 354 (1958); Brown & Williamson Tobacco Corp., 56 F.T.C. 956 (1960) (consent order).

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however, the Commission shifted its attention to industry-wide regulation and promulgated Cigarette Advertising Guides.[3] In 1960, the Commission obtained agreements from the leading cigarette manufacturers to eliminate from their advertising unsubstantiated representations of "tar" and nicotine content.[4]

The Commission responded swiftly to the 1964 Surgeon General's Report,[5] taking its first formal action that same year to require that cigarette manufacturers warn consumers of the health hazards of smoking. Given the "mounting evidence...of the very grave hazards to life and health involved in cigarette smoking," the Commission found that failure of the manufacturers to warn consumers of the danger constituted an unfair and deceptive practice in violation of Section 5 of the Federal Trade Commission Act.[6] The Trade Regulation Rule promulgated by the Commission would have required all cigarette packages and advertisements to disclose clearly and prominently that

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[3] These Guides prohibited, in cigarette advertising and labeling, representations as to the presence or absence of any physical effects from cigarette smoking, unsubstantiated claims about nicotine, "tar" or other components of cigarette smoke, and misleading implications concerning the health consequences of smoking.

[4] 2 Trade Reg. Rep. (CCH) ¶ 7853.51.

[5] Office on Smoking and Health, U.S. Department of Health, Education and Welfare, Smoking and Health: A Report of the Surgeon General (1964) ("1964 Surgeon General's Report").

[6] The 1964 Cigarette Rule at 8324, 8325, 8356.

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Source: https://www.industrydocuments.ucsf.edu/docs/gggm0000

"cigarette smoking is dangerous to health and may cause death from cancer and other diseases."[7]

In 1965, however, Congress pre-empted the F.T.C. action by enacting legislation requiring all cigarette packages distributed in the United States to include the statement: "Caution: Cigarette Smoking May Be Hazardous To Your Health."[8] In addition, the Cigarette Act prohibited the F.T.C. from requiring any other statement on the cigarette package, and precluded, until July 1, 1969, any government requirement of a disclosure regarding smoking and health in cigarette advertisements. The Act also directed the Commission to submit an annual report to Congress on cigarette advertising.

Shortly thereafter, the Commission succeeded in finding an acceptable uniform testing system for measuring the "tar" and nicotine content of cigarettes. In 1966, a letter was sent to U.S. cigarette manufacturers approving their factual statements of "tar" and nicotine content, if such statements were supported by tests conducted in accordance with the approved method.[9] In 1967, the Commission activated its own laboratory to analyze the "tar" and nicotine content of cigarette smoke, and, pursuant to a request from the Chairman of the Senate Commerce Committee, then F.T.C. Chairman

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[7] Id., at 8325.

[8] Federal Cigarette Labeling and Advertising Act ("Cigarette Act"), 15 U.S.C. §§ 1331 et. seq. (1965).

[9] 4 Trade Reg. Rep. (CCH) ¶ 39,012.70. Letter from Federal Trade Commission to major cigarette manufacturers and to Robert B. Meyner, Administrator of the Cigarette Advertising Code (March 25, 1966).

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Source: https://www.industrydocuments.ucsf.edu/docs/gqmf0000

Paul Rand Dixon agreed to test and report periodically to Congress the "tar" and nicotine content of various cigarettes. Test results have been published on a regular basis since that time.

As the congressionally mandated moratorium approached termination in mid-1969, the Commission proposed a modified version of the 1964 Rule that would require all cigarette advertisements to carry the following message: "Warning: Cigarette Smoking Is Dangerous To Health and May Cause Death From Cancer, Coronary Heart Disease, Chronic Bronchitis, Pulmonary Emphysema, and Other Diseases".[10] Congress, however, then amended the message on cigarette packages to read: "Warning: The Surgeon General Has Determined That Cigarette Smoking Is Dangerous To Your Health."[11] Congress also banned cigarette advertisements from the broadcast media after January 1, 1971, and prohibited the Commission from taking any action on its proposed rule prior to July 1, 1971.[12]

In the interim, the Commission proposed a Trade Regulation Rule that would have made it an unfair or deceptive practice for cigarette companies to fail to disclose in their advertising the "tar" and nicotine content of the advertised brand, based on the most recent

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10 34 Fed. Reg. 7917 (1969).

11 15 U.S.C §§ 1331 et. seq. (1970).

12 Id. As a result of the Congressional action prohibiting cigarette advertising from the broadcast media, the Commission decided not to pursue its proposed rule.

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FTC test results.[13] Subsequently, the Commission indefinitely suspended the proceeding to allow the manufacturers to implement a voluntary plan to disclose "tar" and nicotine levels in their advertising. Since 1971, all manufacturers have made disclosures in accordance with this plan.

Later that year, the Commission announced its intention to file complaints against the cigarette companies, alleging that advertising without a clear and conspicuous disclosure that smoking is dangerous to health would be "false and misleading" and constitute an "unfair practice." Lengthy negotiations between the Commission and the six major cigarette manufacturers culminated in 1972 in consent orders requiring all cigarette advertising to display clearly and conspicuously the same warning that Congress already had required on cigarette packages.[14]

Four years later, in May 1976, the Commission again renewed its investigation of cigarette advertising to determine whether its prior actions, or the actions of the cigarette industry in the interim, had effectively remedied the deceptive practices which previously had caused the Commission to conclude that remedial action was necessary. This latest investigation was begun by issuance of

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[13] 35 Fed. Reg. 12671 (1970).

[14] Lorillard, et al, 80 F.T.C. 455 (1972). In 1975, the Commission voted to seek civil penalties against the six major cigarette manufacturers for violation of the orders. This litigation is still pending in the U.S. District Court for the Southern District of New York. FTC v. American Brands et al. C.2180-85 (S.D.N.Y. 1980).

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subpoenas to industry members and their advertising agencies. In January 1979, following a two and one-half year legal proceeding, the Commission won an enforcement action compelling compliance with the subpoenas.[15]

15 F.T.C. v. Carter, 464 F. Supp. 633 (D.D.C. 1979).

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The most persuasive evidence that the current warning is not effective is the evidence indicating that a substantial portion of the population is uninformed about the health hazards of smoking. Significantly, as the evidence indicates, for millions of consumers, the current warning has not provided them with or stimulated them to learn the more specific health information needed to understand the magnitude and the nature of the health hazards of smoking.[19] Also, despite the explicit language of the Surgeon General's warning, 17% of all smokers and 24% of heavy smokers still do not know the very basic fact that smoking is hazardous to health.[20]

Evidence demonstrating that the warning is simply not noticed or read by the vast majority of consumers is another indicia of the ineffectiveness of the current warning. In 1978, the Starch Message Report Service tested the readership of cigarette ads in 24 different magazines for the FTC. Only 2.4% of adults exposed to the tested cigarette ads read the Surgeon General's warning. [Confidential Information Omitted]

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19 See, Ch. III, supra.

20 Gallup Opinion Index at 20; see, Ch. III, Sec II, supra. See also pp. 3-3 and 3-4.

21 [Confidential Information Omitted]

22 [Confidential Information Omitted]

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Consumers agree that the current warning is inadequate. Almost two of every three questioned during the 1978 Roper survey for the Tobacco Institute felt that the current warning is not "adequate" and indicated that they preferred a health warning that describes the specific health risks of smoking.[23]

It is important to understand why the current warning is no longer noticed. The reasons underlying the warning's ineffectiveness, however, go beyond noticeability. A warning may be noticed much more often than the current warning and still be ineffective. Even the ability of consumers to recall the content of the message correctly is not necessarily an accurate gauge of its effectiveness. An effective warning is one that permits consumers to recall and consider its message spontaneously and consciously without prompting at the time a purchasing decision is made.[24] Studies have shown that people do not typically spontaneously recall or consider all of the relevant information stored in their memory in making judgments or decisions. When deciding to smoke, for example, consumers do not ordinarily run through a check list of all they remember or know about the positive and negative aspects of smoking. Rather, only a small subset of the information is actually spontaneously recalled or considered in making their decision, i.e.,

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[23] 1978 Roper Report, q. 25.

[24] Cohen & Srull, Information Processing Issues Involved in the Communication and Retrieval of Cigarette Warning Information, Report Prepared for the Federal Trade Commission, November 1980 ("Cohen and Srull") at 11.

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the information that happens to be most accessible at the time.[25] For four basic reasons, described in detail below, the current warning is not accessible, and, therefore, cannot be effective. They are: (1) the current warning is overexposed and worn out; (2) the current warning is no longer novel and presents no new information; (3) the abstract nature of the current warning makes it more difficult to remember; (4) the current warning is not likely to be perceived as personally relevant.

In contrast to the current warning, cigarette advertisements present positive information about smoking in a highly effective manner. They communicate the desirable aspects of smoking in a variety of attention-getting formats. Having attracted the reader's attention, the ads present positive information about smoking through numerous concrete image-provoking, personalizable themes, each theme presented in many different ways. Information that is distinctive in form, novel or varying in content, concrete, and personalizable is precisely the type of information that people are most likely to notice, think about and spontaneously recall.

Wearout. The Surgeon General's warning fails in part because it has been overexposed; it has been presented in a small inconspicuous rectangle and with unchanged wording in every cigarette advertisement for almost a decade. Although repetition of a message initially

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25 See, e.g., Tversky & Kahneman, Availability: A Heuristic For Judging Frequency and Probability, 5 Cognitive Psychology 207-32 (1973); Tversky & Kahneman, Judgment Under Uncertainty: Heuristics and Biases, 185 Science 1124-31. (1974)

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contributes to improved long-term recall of that message,[26] unless the message is varied it will soon become so familiar that it will "wear out" and no longer be consciously perceived.[27] Whether or not the current warning was ever widely noticed, the evidence indicates that it is no longer read or noticed by most Americans exposed to cigarette advertising, which is not surprising given that neither its shape, nor its wording ever change.[28]

Novelty. One of the most potent factors in increasing the likelihood that a piece of information will be spontaneously retrieved is novelty.[29] Studies have shown that information that is novel or unexpected is likely to capture one's attention, is processed more extensively, and subsequently is much more likely to be recalled than information that is redundant or expected to appear

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26 See, e.g., Sawyer & Ward, "Carryover Effects in Advertising Communication: Evidence and Hypotheses from Behavioral Science," Clarke, ed. Cumulative Advertising Effects: Sources and Implications, 1977.

27 Kaufman, Memory Without Recall, Exposure Without Perception, J. of Advertising Research (Aug. 1977). See, e.g., Craig et al., Advertising Wearout: An Experimental Analysis, J. of Marketing Research (Nov. 1976); Greenberg et al., Television Commercial Wearout, J. of Advertising Research (Oct. 1973); Appel, Advertising Wearout, J. of Advertising Research (Feb. 1971).

28 Zuckerman, Use of Consensus Information in Prediction of Behavior, Journal of Experimental Social Psychology, 163-171 (1978); Nisbett, Borgia, Crandall & Reed, Popular Induction: Information is Not Necessarily Informative, in Cognition and Social Behavior Carroll & Payne (eds.) 1976. Wyer & Hartwick, The Role of Information Retrieval and Conditional Inference Processes in Belief Formation and Change, in Advances in Experimental Social Psychology J. Berkowitz (ed.) (in press).

29 Cohen & Srull, supra, at 12.

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in a given context. Hundreds of studies have demonstrated that any technique that increases an item's novelty enhances subsequent recall of that item.[30]

The least novel, most redundant element in any cigarette advertisement is the Surgeon General's warning. Neither its content nor its form ever varies. Novel information not only captures more attention and is better recalled than redundant information, but it does so at the expense of the redundant information.[31] For example, researchers have found that novel items not only showed enhanced recall but the immediately surrounding items showed unusually low levels of recall.[32] These results suggest that one's attention is drawn to novel information. However, since one's attention and processing capacity is limited, this necessarily means that less attention is paid to immediately surrounding information. Since advertisements are continually changing and often contain novel verbal and pictorial material, it is not surprising to find that many people report not even seeing the warning label when looking at

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30 This is the well known "von Restorff effect" based on the memory research by von Restorff in the 1930's. Hundreds of studies have since replicated this effect, see, e.g, Hastie, Schematic Principles in Human Memory, in Higgins, Herman & Zanna (eds.), Social Cognition: The Ontario Symposium on Personality and Social Psychology (Erlbaum, in press); Wallace, Review of the Historical, Empirical, and Theoretical Status of the Von Restorff Phenomenon, 63 Psychological Bulletin, 410-24 (1965).

31 See, e.g., Newman & Saltz, Isolation Effects: Stimulus and Response Generalization as Explanatory Concepts, 55 Journal of Experimental Psychology, 467-72 (1958).

32 Id.

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standard advertisements. Thus, unless the current warning is changed somehow to make it more novel, it will become increasingly less effective.

Concrete and abstract information. The abstract and general nature of the current warning is another factor contributing to its ineffectiveness. Consumers are unlikely to consider abstract general information like the information contained in the current health warning in their smoking decisions.[33] Concrete information generally refers to objects or events that are readily transformed into mental images. In contrast, abstract information generally refers to abstract concepts that are not readily tranformed into mental images. A picture is obviously concrete since it already contains a specific visual image; words may also be concrete. For example, the words "smoke," "heart" and "cigarette" are concrete, as it is easy to form mental images of such objects. On the other hand, words such as "hazardous" or "health" are very abstract and difficult to transform into mental images.

The ability of certain forms of communication to be transformed into mental images has a number of important consequences. First, concrete information is better remembered than abstract information. Pictures are better remembered than words, and concrete words are

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33 See, e.g., Nisbett, Borgida, Crandall & Reed, Popular Induction: Information is Not Necessarily Informative, in Carroll & Payne (eds.), Cognition and Social Behavior (Erlbaum 1976).

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better remembered than abstract words.[34] Therefore, the current warning is much less likely to be remembered that the other messages communicated in cigarette advertising. Many cigarette advertisements contain rich photographic imagery. In addition, the copy is usually dramatic and concrete. In contrast, the present warning is entirely abstract. It contains words like "health," "hazardous," and "concluded" that are extremely difficult to visualize. It also fails to provide any concrete evidence on which the abstract conclusion is based. Since consumers are not likely to remember the abstract warning, it is not going to be accessible to them when they make a decision to buy or smoke cigarettes.

Second, numerous studies indicate that people rely on concrete information much more than on abstract information in making judgments and decisions.[35] Indeed, it has been shown that there is a dramatic overreliance on concrete information accompanied by a corresponding underreliance on abstract information.[36] For example, people ignore abstract descriptive information about a

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[34] See, e.g., Mandler & Johnson, Some of the Thousand Words a Picture is Worth, 2 Journal of Experimental Psychology: Human Learning and Memory 529-40 (1976); Paivio, Imagery and Verbal Processes Holt, Rinehart & Winston (1976).

[35] See, e.g., Nisbett & Ross, Human Inferences: Strategies and Shortcomings of Social Judgment (Prentice-Hall 1980); Nisbett, Borgida, Crandall & Reed, Popular Induction: Information is Not Necessarily Informative in Carroll & Payne (eds.) Cognition and Social Behavior (Erlbaum 1976).

[36] See, e.g., Borgida & Nisbett, The Differential Impact of Abstract vs. Concrete Information On Decisions, 7 Journal of Applied Social Psychology 258-71 (1977).

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population of people to predict the behavior of an individual, but often use the concrete behavior of an individual to predict characteristics of the entire population.[37] Similarly, it has been shown that when people estimate the risk associated with various activities or events, abstract statistical summaries are largely ignored, while vivid individual cases are weighed quite heavily.[38]

Thus, the concrete information contained throughout most cigarette ads lessens even further the impact of the abstract information contained in the health warning. The ads are rich in thematic imagery associating smoking with warmth, friendliness, outdoor activities, athletics, and individualism. They are filled with vigorous, attractive, healthy-looking people living energetic lives full of social acceptance, success, and athletic achievement, free from any smoking hazards. Individuals seeing these cigarette ads are much more likely, therefore, to use the concrete positive images of smoking in deciding whether or not to smoke than they are the abstract general health warning.

Personal relevance of information. Information which consumers perceive as having personal implications and relevance to themselves is most likely to be noticed, remembered and considered. Abstract

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[37] Id.; see also, Hamill, Wilson & Nisbett, Insensitivity to Sample Bias: Generalizing from Atypical Cases, 39 Journal of Personality and Social Psychology, 578-89 (1980).

[38] Slovic, Fischoff & Lichtenstein, Cognitive Processes and Societal Risk Taking in Carroll & Payne (eds.) Cognition and Social Behavior (Erlbaum 1976).

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information is more likely to be perceived as personally irrelevant than concrete information. There is a large difference between being aware of the statement that "smoking is dangerous" and believing that "my smoking will injure me."[39] The former is seen as an abstract statement which is difficult to interpret in terms of one's personal experiences. In contrast, the evidence indicates that relating a piece of information to oneself induces the deepest levels of memory.[40] The current warning is not likely to be seen as personally relevant. It is extremely abstract. As such, it is less likely to be spontaneously recalled and less likely to be considered in any smoking decision.[41]

In conclusion, all the available evidence indicates that the current warning is an ineffective remedy to the possible deception by omission in cigarette advertising. Staff has considered the reasons for this ineffectiveness in its discussion of alternative methods for more effectively providing consumers with additional health information about the health risks of smoking, See, Ch. V., infra.

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39 See, e.g., Fishbein, Consumer Beliefs and Behavior With Respect to Cigarette Smoking: A Critical Analysis of the Public Literature, F.T.C. Annual Report to Congress on Cigarette Advertising for the Year 1977, Appendix A.

40 Rodgers, Kuiper & Kirker, Self-Reference and the Encoding of Personal Information, 35 Journal of Personality and Social Psychology, 677-88 (1977).

41 There is also a great deal of evidence that people are more likely to dismiss as irrelevant evidence that is highly discrepant with their own behavior or beliefs. In creating a remedy to any possible deception, consideration must be given to this problem.

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III. LEGAL DISCUSSION: CURRENT CIGARETTE ADVERTISING MAY VIOLATE THE SECTION 5 PROHIBITION AGAINST DECEPTIVE ADVERTISING [42]

A. Introduction

If the Commission determines that it is necessary and appropriate for it to take some action to remedy the problem discussed in this report, it will be necessary to determine whether the problem discussed violates the Federal Trade Commission Act. Section 5 of the Federal Trade Commission Act has long been interpreted to proscribe all forms of deceptive advertising. The test for unlawful deception under Section 5 is whether a "substantial segment of the purchasing public is likely to be deceived."[43] It is not necessary to prove that an advertisement has actually misled the public to justify a finding that the ad is unlawfully deceptive. It is sufficient for the Commission to find that the advertisement has the tendency or capacity to deceive.[44] The determination of the meaning of an ad and its tendency to mislead consumers also need not

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[42] Section 11 of the Federal Trade Commission Improvements Act of 1980, Public Law 96-252, prohibits the Commission from initiating any new rulemaking proceeding which regulates commercial advertising on the basis that such commercial advertising constitutes an "unfair" act or practice. In light of the fact that one of the possible courses of action the Commission may at some time take as a result of the information contained in this report is to initiate a rulemaking proceeding, the staff report does not evaluate whether current cigarette advertising practices may be "unfair".

[43] 1964 Cigarette Rule, supra at 8350.

[44] Beneficial Corp. v. F.T.C., 542 F.2d 611, 617 (3rd Cir. 1976); Charles of the Ritz Dist. Corp. v. F.T.C., 143 F.2d 676, 680 (2d Cir. 1944).

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depend on exhibits, testimony, or a survey of consumers' perceptions, although the Commission considers such evidence, whenever available, so that its judgment will be as informed as possible.[45] Based on its own expertise, the Commission can determine whether an advertisement is deceptive from a review of the advertisement itself.[46] In so doing, the Commission may consider the net impression the ad may convey to the general populace.[47] The meaning of an advertisement and its tendency or capacity to deceive are questions of fact to be determined by the Commission.[48]

Even where no false statement is made, deception may occur by the advertiser's failure to disclose material facts in a situation in which there is a disparity between the actual consequences which may result from the use of the advertised product and the expectations of a substantial segment of the public about the consequences of using the product.[49] An advertiser's failure to disclose material facts

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45 The J.B. Williams Co. v. F.T.C., 381 F.2d 884, 889 (6th Cir. 1967); Carter Products Inc. v. F.T.C., 323 F.2d 523, 528 (5th Cir. 1963).

46 Carter Products, Inc. v. F.T.C., 323 F.2d at 528.

47 Id.

48 Kalwajtys v. F.T.C., 237 F.2d 654, 656 (7th Cir. 1956), cert. denied, 352 U.S. 1025 (1957); Gulf Oil Corp. v F.T.C., 150 F.2d 106, 108 (5th Cir. 1945).

49 1964 Cigarette Rule, supra, at 8352.

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in these circumstances is fully equivalent to deception by misleading statements or suggestions.[50]

However, the Commission's concern about the inclusion of information in advertisements is limited to situations in which the advertiser's failure to disclose certain information constitutes "an unfair or deceptive act or practice" within the meaning of Section 5 of the Federal Trade Commission Act. Advertisements need not contain every piece of information about the product being advertised. In fact, the situations in which the Commission has required informational disclosures in advertisements and the type of information which has been required to be disclosed have been carefully limited. Thus, it is necessary to analyze each of the elements of the law of deception by omission carefully to determine what information the law requires to be included.

B. Elements of the Law of Deception by Omission as Applied to Cigarette Advertising.

In the Statement of Basis and Purpose for the 1964 Cigarette Rule, the Commission articulated three elements of deception by omission:

(1) Certain facts about a product or the consequences of its use must not be adequately disclosed in the advertisements.

(2) The information which is not disclosed must be material. A material fact has traditionally been defined as one "likely to affect the average consumer in deciding whether to purchase the advertised product."

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[50] 1964 Cigarette Rule, supra, at 8351; P. Lorillard Co. v. F.T.C., 186 F.2d 52, 58 (4th Cir. 1950); Simeon Management Corp. v. F.T.C., 579 F.2d 1137, 1145 (9th Cir. 1978).

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(3) A substantial portion of consumers must be aware of or hold false expectations about the nondisclosed material facts.[51]

In addition, as we discuss in detail at the conclusion of this section, the Commission has been particularly concerned when one or more of the following factors is present: (a) the product is hazardous to health, (b) particularly vulnerable groups of consumers are affected, and (c) the deception is aggravated by continuous, massive advertising.

Applying the elements of the law of deception by omission to current cigarette advertising leads the staff to conclude that it may be deceptive. Little discussion is needed to establish the existence of the first element.

It is clear that current cigarette advertising fails to disclose adequate facts about cigarettes and the health consequences of their use. The ads do not reveal any of the information about the specific hazards of smoking, the severity of these risks or the smokers' increased probability of suffering these harmful effects. As we previously noted, while the current warning may have represented a reasonable remedial effort a decade ago based on the evidence then available, new evidence appears to indicate that the current warning is ineffective. The remaining two elements of the law of deception by omission are discussed in further detail below.

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[51] 1964 Cigarette Rule, supra at 8351.

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1. A "substantial segment" of the population has a lack of knowledge of or holds false beliefs about the hazards of of cigarette smoking.[52]

To find deception

> [t]he Commission is not required to establish that a preponderance of the public is deceived. It is only necessary to establish...[that the ads have the capacity to deceive] any group of buyers even though they may be more susceptible to misrepresentations of the seller (intended or unintended) than a majority of buyers.[53]

In cases such as this involving health and safety, the Commission has found that the "substantial portion" requirement has been met when as few as 9% of the public was misled. However, the data in this report indicate that a much larger portion of the public lacks sufficient knowledge of the hazards of cigarette smoking. Therefore, as part of this investigation, the Commission need not decide whether, today, there would be a violation of Section 5 if as few as 9% of the public was misled. In addition, although the cases cited in the following analysis involve advertisements containing false statements, the same rationale which led the Commission to reach its conclusion in these cases applies to cases of deception by omission. Therefore, it is appropriate for the Commission to apply the same legal principles.[54]

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[52] 1964 Cigarette Rule, supra, at 8350; Rhodes Pharmacal Co. v. F.T.C., 208 F.2d 382 (7th Cir. 1953); Bristol-Myers Co., et al., 85 F.T.C. 688 (1975).

[53] Benrus Watch Co. Inc., et al., 64 F.T.C. 1018, 1032 (1964).

[54] 1964 Cigarette Rule, supra at 8351; Simeon Management Co. v. F.T.C., 579 F.2d at 1145.

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In Rhodes Pharmacal Co. v. F.T.C., 208 F.2d 382 (7th Cir. 1953), a Commission finding of deception in advertising of a claimed "cure" for arthritis was upheld, although evidence indicated that only 9% of the public interpreted the ad to suggest the product "cured" arthritis. Similarly, in a case involving safety claims for automobile tires, the U.S. Court of Appeals for the Sixth Circuit refused "to overturn the deception findings of the Commission if the ad...misled 15% (or 10%) of the buying public." Firestone Tire and Rubber Co. v. FTC, 481 F.2d 246, 249 (6th Cir. 1973).

In several other cases, the Commission has reached similar results. In Benrus Watch Co. Inc., et al., 64 F.T.C. 1018 (1964), the company argued that the public was not misled by Benrus' policy of including an inflated "manufacturer's suggested price" on its watches, because 86% of the public, according to survey data, "knew" that retail prices commonly varied from manufacturers' suggested prices. The Hearing Examiner, whose findings were adopted by the Commission, concluded that:

> ...assuming that 86% of the public would not be deceived by the ticketed price because they knew prices were variable, the remaining 14% [who did not know] would apparently be deceived by the ticketed price. [The survey] therefore indicates unequivocally that a substantial segment of the public would be deceived... 64 F.T.C. at 1032.

In ITT Continental Baking Co. Inc., et al., 83 F.T.C. 865 (1973), modified, 83 F.T.C. 1105 (1973), aff'd 532 F.2d 207 (2nd Cir. 1976), the Commission found that Wonder Bread ads with misleading claims concerning nutrition and growth had the capacity to deceive a "substantial portion" of the public based upon surveys indicating that 10% of the public in 1970 and 9% in 1971 were misled. In

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Bristol-Myers Co. et al., 85 F.T.C. 688 (1975), the Commission, in dismissing a deception action on other grounds, agreed that survey results which indicated beliefs of "probably somewhere between 14% and 33%" of the population satisfied the "substantial portion of the public" standard. 85 F.T.C. at 744. In Elliot Knitwear, Inc., et al., 59 F.T.C. 893 (1961), the Commission held that labeling practices which are likely to deceive 13% of the population are actionable under Section 5.

As defined by previous cases, the "substantial portion" standard is satisfied in the case of cigarette advertising. While staff has proceeded on the assumption that most Americans are generally aware that smoking may be hazardous to health, the data show that some still are not and that among smokers, many are still not aware of this fact. The data indicate that 17% of smokers don't believe this basic fact, and 24% of heavy smokers don't believe it.[55] Thus, these data indicate that millions of smokers do not know the basic fact that smoking is harmful to their health. However, these data present only a small part of the picture.

Even if every consumer were generally aware that smoking was somehow hazardous to health, the evidence indicates that a signficant percentage of consumers do not know enough about the specific health risks of smoking to assess their personal health risk from smoking or know how dangerous smoking is for them. The evidence indicates that

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[55] Gallup Opinion Index at 21; see Ch. III, supra.

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many seriously underestimate the severity of the harms of smoking and the probability of suffering these harms. Many also do not know of the existence of the relationship between smoking and many of the most serious health consequences of smoking.

It is relevant to a consumer's understanding of how dangerous smoking is, to know, for example, that it significantly reduces one's life expectancy, i.e., increases the risk of premature death. Yet, 30% of the population and 41% of smokers do not know that, for example, a 30 year old who smokes one pack a day, significantly reduces his life expectancy.[56] Among those who do know that smoking reduces one's life expectancy, many seriously underestimate the extent of the risk of premature death from smoking.[57] Moreover, 50%, or one-half, of light smokers falsely believe that only "heavy" smoking is hazardous.[58]

Despite the "overwhelming" medical evidence,[59] a large portion of the public still does not know smoking causes cancer. [Confidential Information Omitted] There is also substantial consumer ignorance concerning the relationship between smoking and specific cancers. Surveys indicate that between 19% and [Confidential Information Omittted] of the population, and between

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56 1980 Roper Study.

57 Id.

58 1978 Roper, q. 16, 17; see Ch. III, Sec. II, supra.

59 1979 Surgeon General's Report, Ch. 1 at 16.

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27% and [Confidential Information Omitted] of smokers, don't know smoking causes lung cancer,[60] while between one-quarter and one-half of the population is unaware that smoking is the major cause of lung cancer.[61] In addition, many more consumers seriously underestimate the risk of getting lung cancer as the result of smoking,[62] as well as the risk of dying from smoking related lung cancer.[63]

A substantial portion of the public also does not know about the relationship between smoking and several other serious health problems. Between 32% and [Confidential Information Omitted] of the population do not know that smoking causes heart disease, while among smokers between 37% and [Confidential Information Omitted] are unaware of this fact.[64] Over 50% of the population does not know that smoking causes many as opposed to just a few cases of heart attack.[65] About 10% of adults and 20% of teens do not know that smoking causes emphysema and bronchitis.[66] More than one-third of the population does not know that smoking causes many cases of

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[60] The surveys were conducted by Gallup [Confidential Information Omitted]; see Ch. III, supra. See also 1980 Roper Study.

[61] 1978 Roper, q. 18h; see Ch. III, Sec. III, supra; 1980 Roper.

[62] Chilton, q. 20; see Ch. III, Sec. III, supra; 1980 Roper.

[63] Chilton, q. 24; see Ch. III, Sec. III, supra.

[64] See Ch. III, Sec. IV, supra.

[65] 1980 Roper.

[66] Chilton, q. 42(b)(c); see Ch. III, Sec. V, supra.

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emphysema and bronchitis, while over 60% do not know that smoking causes most cases of these diseases.[67] Large percentages of the population also do not know that maternal smoking during pregnancy threatens the life and health of the fetus. Over 40% of the population, approximately 50% of women and more than half of those who smoke,[68] don't know that maternal smoking increases the likelihood of miscarriage or stillbirth.[69] About two-thirds of college students polled, and three-quarters of the college student smokers, did not know about the increased risk of neonatal death from maternal smoking.[70]

About one-half of the population does not know that smoking is considered addictive by many experts,[71] and a similar percentage does not know that cigarette smoke contains the toxic gas carbon monoxide.[72] In addition, the data suggest that substantial portions of the population overestimate the safety of low "tar" and nicotine cigarettes,[73] and underestimate the greatly increased risk of heart

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67 1980 Roper.

68 Chilton, q. 39, 40.

69 Chilton, q. 39, 40; see Ch. III, Sec. VI, supra; 1980 Roper. The Shor study, see Ch. III, Sec. VI, supra, found that about 75% of the college students sampled expressed doubt that smoking increases the risk of miscarriage or stillbirth.

70 Shor, at 24; see Ch. III, Sec. VI., supra.

71 1978 Roper, q. 32; see Ch. III, Sec. VII, supra.

72 Chilton, q. 43; see Ch. III, Sec. VII, supra.

73 See Ch. III, Sec. VII, supra; 1980 Roper.

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attack from smoking for women who take birth control pills. In fact, 36% of the population does not know that a woman who takes birth control pills substantially increases her risk of heart attack if she also smokes.[74]

In conclusion, it appears that the "substantial portion" requirement is satisfied in this case. Viewed in its entirety, the evidence demonstrates that millions of Americans do not appreciate the impact of smoking on their life expectancy, their increased risk of suffering death or disease from cancer, heart attack and lung disease, or the serious danger to the fetus from maternal smoking during pregnancy.

2. Materiality of omitted facts.

A deceptive advertisement violates Section 5 if it fails to disclose information that is material or "likely to affect the average consumer in deciding whether to purchase the advertised product."[75] Traditionally, the Commission has not been required to conduct a consumer survey to determine whether the omitted information is material although such evidence is considered whenever available. "Once the Commission has found an advertisement to be deceptive, it is authorized within the bounds of reason, to infer that the deceptive information would be a material factor in the

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74 See Ch. III, Sec. VII, supra; 1980 Roper.

75 1964 Cigarette Rule, supra at 8351.

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Source: https://www.industrydocuments.ucsf.edu/docs/ggmk0000

consumer's decision to buy."[76] In cases involving consumer health or safety, the Commission consistently has assumed that omitted health and safety information is material.[77] Thus, there is a presumption that information relevant to consumer health and safety is material.

The only health-related information provided by cigarette advertisers is the government-mandated health warning. As we have discussed in Chapter IV, Section II, while the current health warning represented a reasonable remedial effort nearly a decade ago based upon the evidence then available, the continued growth of medical knowledge about the health consequences of smoking and new evidence about the present ineffectiveness of the current warning indicates that a new informational remedy may now be necessary.

In analogous but not identical situations, the Commission previously has held that a general health warning may not be adequate and that specific information concerning the health hazards of smoking may be material. For example, in American Medicinal Products, Inc., et al., 32 F.T.C. 1376 (1941), aff'd, 136 F.2d 426 (9th Cir. 1943), advertised health warnings that were much more

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76 Simeon Management Corp. v. F.T.C., 579 F.2d at 1146; See, e.g., F.T.C. v. Colgate Palmolive Co., 380 U.S. 374, 392 (1965).

77 The Firestone Tire and Rubber Co., 81 F.T.C., 398, 451 (1972), aff'd, 481 F. 2d 246 (6th Cir. 1973), cert. denied, 414 U.S. 1112 (1973); Aronberg v. F.T.C., 132 F.2d 165, 168-69 (7th Cir. 1943); Simeon Management Corp. v. F.T.C., 579 F.2d at 1145; Seymour Dress and Blouse Co., 49 F.T.C. 1278, 1282 (1953); Academy Knitted Fabrics Corp., et al., 49 F.T.C. 697 (1952).

Source: https://www.industrydocuments.ucsf.edu/docs/ggmk0000

detailed than the current cigarette warning were found to be deceptive. In that case, it was held insufficient merely to warn that the preparation was not to be taken by children or by people suffering from tuberculosis, diabetes, or goiter, and that it should be used according to label directions. Instead, the seller was ordered to divulge that the preparation should only be used under medical supervision, that it was definitely harmful if used by persons suffering from certain specific diseases, and that it might cause breakdown of muscular tissue, irritation of nerve tissue, nervousness, irritability, and increased heart rate, with possible irreparable injury to the health of even a normal individual.[78] It should, nonetheless, be noted that these cases have not provided a conclusive formula for determining every situation in which advertisers will be required to provide more detailed health information than a general health warning. To date, the Commission has made its determinations of this issue based upon the facts of the particular case, including the nature and potential severity of the injury involved, a review of the advertisements in question and other facts it has found to be relevant.

In the case of cigarette advertising, the health information omitted from the current ads is both necessary and material. First,

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78 See also, Positive Products Co., 33 F.T.C. 1327, aff'd sub nom. Aronberg v. F.T.C., 132 F.2d 165 (7th Cir. 1942) (detailed health warnings required on ads for medicinal preparations); Simeon Management Corp. v. F.T.C., 579 F.2d 1137 (9th Cir. 1978) (failure to disclose that drug lacked FDA approval for weight loss was deceptive).

Source: https://www.industrydocuments.ucsf.edu/docs/ggmk0000

the public lacks information about the specific hazards of smoking. Lacking this information, consumers cannot adequately assess the overall health risks of smoking in terms of the type of diseases they may develop, the severity of harm they might suffer or their increased likelihood of suffering these adverse health consequences. If any information is material to consumers, information that the product being advertised can kill them or lead to such diseases as cancer, heart attack, bronchitis or emphysema should fit this definition.

Second, a substantial number of people say that they need more information about smoking and health and that they prefer a warning that discloses the specific dangers of smoking. Respondents were asked whether they knew enough about the issue of smoking and health or whether they needed to know more. One-quarter of both smokers and nonsmokers said they needed more information. Young people were more apt to want more information than older people. Of those who reported recently being exposed to any worrisome information about smoking, 40% felt that they needed more information.[79] These results substantiate previous HEW findings that half of the adult population "mildly disagree" or "strongly disagree" that "the general public knows all it needs to know about the effects of smoking and health."[80] Most important, nearly two of every three respondents

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[79] 1978 Roper Report, q. 68.

[80] Department of Health, Education and Welfare, Center for Disease Control, National Cancer Institute, Adult Use of Tobacco, q. 3(b).

Source: https://www.industrydocuments.ucsf.edu/docs/ggmk0000

judged the current warning inadequate and preferred a stronger, more specific warning listing particular dangers of smoking.[81]

Third, people have considered health information in their smoking decisions. Ex-smokers cite "government reports on the effects of smoking and health" as an important reason they quit smoking.[82] More health information might also help the two-thirds of current smokers who say they want to quit smoking.[83] In addition to this self-report data, a recent study by the FTC Bureau of Economics[84]

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[81] 1978 Roper Report, q. 25. Sixty-one percent of all respondents (47% of smokers and 69% of nonsmokers) favored a warning described to them as "a specific one naming the hazards." It read, "Warning: cigarette smoking is dangerous to health, and may cause death from cancer, coronary heart disease, chronic bronchitis, pulmonary emphysema and other diseases." This is the same warning that the Commission recommended that Congress require on cigarette packages. F.T.C.'s Annual Report to Congress on Cigarette Advertising for the Year 1978 at 14.

[82] The 1978 Roper Report asked former smokers to choose from a list of items one or two factors that had the most to do with causing them to quit. The most often cited factor (37%) was "health problems." The third most cited factor (17%, compared with 14% in 1974) was government reports of the effects of smoking on health. Among young adults ages 21-24 "government reports" were cited as often as "health problems." Id., q. 61. [Confidential Information Omitted]

[83] Sixty-six percent of smokers would "sort of like to give it up," "very much like to quit," or "like to quit but can't." 1978 Roper, q. 43.

[84] F.T.C., Bureau of Economics, Staff Report on Consumer Responses to Cigarette Health Information, August, 1979. This report also concluded that while the televised public service announcements aired under the FCC's fairness doctine from 1968 to 1971 may have contributed to the decline in per capita cigarette consumption, there is no evidence that they had an effect unique from other information sources. This conclusion controverts those of prior studies and authorities that attribute a unique role in the decline to the PSAs. Warner, K., The Effects of the Anti-Smoking Campaign on Cigarette Consumption, Am. J. Public Health 645-650, (1979); Fishbein Study at

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Source: https://www.industrydocuments.ucsf.edu/docs/ggmk0000

concludes that health information from a variety of sources, including the 1964 Surgeon General's Report, media publicity, warning labels, and televised public service announcements led to a gradual decline in per capita consumption of cigarettes from 1964 to 1975. Finally, the Surgeon General credits informational and educational public health campaigns of the past 15 years with "dramatic changes ... in adult smoking"[85] and urges officials to "ensure that smokers and potential smokers are adequately informed of the hazards."[86]

The preceding discussion indicates that in the staff's view, cigarette advertising has omitted material information about the health risks involved in cigarette smoking. Precisely what additional information should be disseminated to the public to enable it to accurately assess the risks of smoking should be evaluated after public comment and additional analysis.

C. The Possible Deception in Cigarette Advertising Would Seem Particularly Appropriate For Action Because Cigarettes Are Hazardous to Health, Adversely Affect Particularly Vulnerable Groups And Are The Subject of Continuous, Massive Advertising

The Commission has been particularly concerned about deceptive advertising when one or more of the following three factors is

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84 (Footnote Continued)

67; Miller, R.H., Factors Affecting Cigarette Consumption, U.S.D.A. Research Service 1974; Hamilton, The Demand for Cigarettes: Advertising, the Health Scare, and the Cigarette Advertising Ban, Rev. of Economics and Statistics 401-11 (Nov. 1972); Capital Broadcasting v. Mitchell, 333 F. Supp. 582, 587 (D.D.C. 1971) (J. Skelly Wright dissenting), aff'd, 405 U.S. 1000 (1972).

85 1979 Surgeon General's Report, Ch. 19 at 9.

86 Id., Preface at xiv.

Source: https://www.industrydocuments.ucsf.edu/docs/ggmk0000

present: (1) the product is hazardous to health, (2) the product and/or the ad may adversely affect particularly vulnerable groups of consumers, and (3) any deception is aggravated by continuous, massive advertising. All three factors exist in cigarette advertising and would exacerbate its possible deception.

First, the deceptive advertising of products which affect consumer health and safety has often been the subject of Commission action. In these cases the Commission has required that all advertisements of such products be accurate and complete,[87] especially when the potential injury is severe and the number of people affected is large.[88] As the Commission held in Firestone Tire and Rubber Co,

> We note at the outset that both alleged misrepresentations go to the issue of the safety of respondent's product, an issue of great significance to consumers. On this issue the Commission has required scrupulous accuracy in advertising claims, for obvious reasons. If consumers are misled or uninformed as to the safety of a product, the consequences may not be limited to monetary loss but personal injury as well. Thus, the Commission has frequently decided that the omission of product safety information is an unfair and deceptive practice. 81 F.T.C. at 456, aff'd, 481 F.2d 246 (6th Cir. 1973), cert. denied, 414 U.S. 1112 (1973).

Second, advertisements which affect vulnerable consumers have also been subjected to particularly close scrutiny. In this case,

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87 National Commission on Egg Nutrition, et al., 88 F.T.C. 89, 162 (1976), modified, 570 F.2d 157 (7th Cir. 1977), cert. denied, 439 U.S. 821 (1978).

88 1964 Cigarette Rule, supra, at 8354.

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this concern encompasses those who are subject to a high risk of personal injury from using an advertised product because of their physical condition or environment. This latter type of vulnerable audience includes those who have a physical condition that may be aggravated by use of a product,[89] such as those who are ill, pregnant,[90] obese,[91] and those who may for other reasons be particularly affected by use of the hazardous product.

Third, the Commission has recognized that a potentially deceptive advertisement cannot be viewed "in isolation," but must be considered "against the background" of the cumulative effect of years of similar advertising.[92] The total impact of prolonged and voluminous advertising may exacerbate the misimpression created by the advertising. Repeated exposure to a large number of ads that extol

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89 American Medicinal Products, Inc. v. F.T.C., 136 F.2d 426 (9th Cir. 1943); Miracle Hearing Aid, Inc., 49 F.T.C. 1410 (1953); Pascal Co., Inc., 32 F.T.C. 1216 (1941).

90 Aronberg v. F.T.C., 132 F.2d 165 (7th Cir. 1943); Dr. Jane Blanchard, 32 F.T.C. 1291 (1941).

91 Simeon Management Co. v. F.T.C., 579 F.2d 1137 (9th Cir. 1978); American Medicinal Products Inc., v. F.T.C., 136 F.2d 426 (9th Cir. 1943); Porter & Dietsch, Inc., et al., 90 F.T.C. 770 (1977).

92 Warner-Lambert Co. v. F.T.C., 562 F.2d 749 (D.C. Cir. 1977); see, Waltham Watch Co. v. F.T.C., 318 F.2d 28 (7th Cir. 1963), cert. denied, 375 U.S. 944 (1963); Royal Baking Powder v. F.T.C., 281 F. 744 (2d Cir. 1922); 1964 Cigarette Rule, supra, at 8356-8357.

Source: https://www.industrydocuments.ucsf.edu/docs/ggmk0000

the virtues of a product without disclosing its specific negative consequences may cause consumers to ignore those negative facts.[93]

All three of these aggravating factors are applicable to current cigarette advertising. As discussed above, the scientific evidence that smoking is linked to various forms of cancer, heart disease and chronic obstructive lung disease is now overwhelming.

Cigarette advertising and smoking also affect certain vulnerable consumers. For example, pregnant women who smoke jeopardize the health and safety of the fetus and newborn infant. Women who take birth control pills greatly increase their risk of heart attack if they also smoke. Individuals who suffer from cardiovascular disease, chronic obstructive lung disease or anemia exacerbate their already existing health problems if they smoke.

Finally, cigarettes are the most heavily advertised product in America today. In 1979, two of the top five advertisers in magazines were cigarette companies. During the same year cigarettes were the most heavily advertised product in newspapers and almost one-half of all outdoor billboards in this country are devoted to cigarette advertising.

The applicability of all three factors to cigarette advertising makes it especially important that cigarette ads be accurate and complete in disclosing the health risks of smoking. Therefore, any deception in cigarette advertising practices may be particularly appropriate for action.

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93 Id. See also The J.B. Williams Co. v. F.T.C., 381 F.2d, 884, 890 (6th Cir, 1967).

Source: https://www.industrydocuments.ucsf.edu/docs/gcmb0000

D. Conclusion

In sum, cigarette advertising does not disclose material health and safety information. As a result many smokers remain unaware of the very basic fact that smoking is hazardous to health and many more hold false beliefs about the existence, probability and severity of these dangers. In addition, the evidence indicates that the current warning is not an effective remedy for overcoming this problem.

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Source: https://www.industrydocuments.ucsf.edu/docs/ggmk0000

CHAPTER V - REMEDIAL OPTIONS AND RECOMMENDATONS*

I. INTRODUCTION

The findings of this Report indicate that: (1) Over the past 15 years medical research has strengthened the evidence demonstrating the relationship of smoking to diseases such as cancer, heart attack and chronic obstructive lung disease and has established the relationship between smoking and a number of other health hazards about which little was known in 1964. The medical evidence accumulated over the past two decades also indicates that cigarette smoking is far more dangerous to health than was thought in 1964. (2) With the exception of the required health warning, cigarette advertising contains no health information. (3) While the number of Americans who are generally aware that smoking is in some way hazardous to health has grown steadily, some, especially smokers, still do not know this basic fact. More significantly, a much larger number know too little about the specific health hazards of smoking to be able to assess accurately how dangerous smoking is and whether the health risks of smoking have any personal relevance or application to themselves. (4) The current health warning is rarely noticed and is not effective in alerting consumers to the health hazards of smoking.

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* In addition to the information in this Chapter, the Commission relied upon information supplied by the cigarette companies pursuant to subpoena in a confidential marketing plan and in a confidential memo outlining a plan to bring to the public the industry's position on smoking and health. This information has been deleted from the version of the report released to the public.

Source: https://www.industrydocuments.ucsf.edu/docs/ggnk0000

Based upon these findings staff is concerned that current cigarette advertising practices may be deceptive. Staff has also tentatively concluded that additional action designed to provide consumers with more information about the health consequences of smoking is necessary. An effective remedy should be noticed by consumers, should maintain its noticeability over time, and should effectively convey sufficient information to prevent any possible deception.

In this investigation, staff has considered a number of remedial options, including (a) educational efforts of other governmental and private organizations, (b) voluntary industry self-regulation, (c) alteration of the size and shape of the warning, (d) replacement of the current warning with a single new, more specific warning, (e) replacement of the current warning with a rotational warning system, (f) tombstone advertising, and (g) disclosure of carbon monoxide levels. A number of these options are not mutually exclusive. For example, a change in the size and shape of the health warning can be accompanied by either the adoption of a new warning or a system of rotational warnings. A change in the warning can also be accompanied by increased educational efforts by other governmental and private organizations.

Many organizations, both inside and outside of government, have historically participated in efforts to inform the public of the health hazards of smoking. Congress has traditionally maintained exclusive jurisdiction over the warning on cigarette packages, while the Commission has taken responsibility for the health disclosures on cigarette advertisements. The Department of Health and Human

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Source: https://www.industrydocuments.ucsf.edu/docs/ggmk0000

Services, along with various private organizations, has played the primary role for other educational efforts in this area. It should be emphasized that any option must be viewed as one part of an overall educational effort, if any option is to be effective.

Therefore, to determine what action is ultimately most appropriate, as well as who should undertake that action, will require a cooperative effort on the part of Congress, the Commission and other appropriate governmental and private agencies.

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II. REMEDIAL OPTIONS

A. Educational Efforts of Other Governmental and Private Organizations

Many believe that public information campaigns conducted through the mass media have the greatest impact on consumer knowledge. The classic example of such a campaign is the series of informational commercials on smoking that appeared on television between 1967 and 1971.[1] Although a recent study by the Commission's Bureau of Economics found that it is impossible to determine precisely the effectiveness of any single method of public education, including these public service announcements, the study also concludes that, as part of an overall educational effort, public service announcement campaigns do serve a useful purpose.[2] Therefore, staff has examined the role currently being played by public service campaigns sponsored by either governmental or private organizations in

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[1] See, J. Hamilton, "The Demand for Cigarettes: Advertising, The Health Scare, and the Cigarette Advertising Ban," Review of Economics and Statistics 401-11 (Nov. 1972); Warner, "The Effects of the Anti-Smoking Campaign on Cigarette Consumption," 67 American Journal of Public Health 645-50 (July 1977). The effectiveness of these PSA's was judicially recognized by Judge Wright in his dissent in Capitol Broadcasting Co. v. Mitchell, 333 F. Supp. 582, 587 (D.D.C. 1971), aff'd 405 U.S. 1000 (1972).In referring to the Fairness Doctrine PSA's Judge Wright stated:

> For the first time in years, the statistics began to show a sustained trend toward lesser cigarette consumption...the anti-smoking messages were having a devastating effect on cigarette consumption. Id.

[2] F.T.C., Bureau of Economics, Staff Report on Consumer Responses to Cigarette Health Information, August 1979. The Bureau of Economics Report concludes that, although useful, the effect of the 1967-71 messages on smoking may have been overstated.

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Source: https://www.industrydocuments.ucsf.edu/docs/gpm80000

fulfilling the need to better inform consumers about the health hazards of smoking.

In the aftermath of the broadcast ban on cigarette commercials, the number of informational messages on smoking and health was also reduced. The present number and exposure of PSA's are inadequate to inform the public about the dangers of smoking and are not sufficient, by themselves, to remedy the problems discussed in this report. The primary government agency responsible for education on smoking is the Department of Health and Human Services' Office on Smoking and Health (OSH). OSH publishes smoking and health information, produces informational PSA's on smoking and health and serves as a clearinghouse for collecting and disseminating scientific and technical information on smoking and health. The entire OSH budget for Fiscal Year 1980 was $2.5 million.[3] Of that, only an estimated $750,000 was spent on public information.[4] The major expenditure was a $432,000 contract with an advertising agency to develop a media campaign.[5] The remainder of the public information funds were spent on the implementation of the agency's suggestions.

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[3] Letter from John Bagrosky of OSH to FTC (April 1, 1981).

[4] Id. In addition to the $750,000 spent on public information, an additional $500,000 was spent on technical information. Basically, the money was spent to compile a bibliography of smoking studies, to keep track of ongoing research, and to respond to requests for technical information from scientists, researchers, and the lay public.

[5] Id.

Source: https://www.industrydocuments.ucsf.edu/docs/gqgk0000

The effectiveness of mass media PSA's depends upon the frequency of their appearance and the size of the audience they reach. Between 1967 and 1971, smoking PSA's were seen often and by many people. Today, they are virtually invisible.

As part of its public education program, the Office on Smoking and Health (OSH) produces public service announcements (PSA's) on the health hazards of smoking. These PSA's are then broadcast without charge by the networks and by local television stations as part of their responsibility to broadcast in the public interest. OSH monitors how often and at what times these PSA's are broadcast.[6]

Two PSA's about smoking were in circulation in the Fall of 1980, but were infrequently shown, and even when shown, were seen at times when the fewest viewers watch television.

The three networks rarely broadcast the PSA's during prime time. During September and October 1980 only one was seen during prime time. The majority of the broadcasts were after midnight, with the remainder appearing very early in the morning, another light viewing time. Moreover, the data relied upon in monitoring indicates only when the network itself broadcast the PSA's. The network affiliate stations are under no obligation to include the PSAs broadcast by the network in their programming, so even these infrequently shown PSA's might not have been seen in every market.

The local television stations also do not broadcast many PSA's. In over 80% of the largest 75 markets during the monitored week in

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[6] The data in the following discussion of exposure of government PSA's comes from information provided by the Office on Smoking and Health.

Source: https://www.industrydocuments.ucsf.edu/docs/ggmk0000

September 1980, no government produced PSA about smoking was broadcast during prime time. Among the major markets without a prime time broadcast were Boston, Chicago, Detroit, Houston, Los Angeles, and Philadelphia. Of the PSA's broadcast at other times, most appeared during the daytime or late at night. Of the two messages monitored, one failed to reach fully 91.5% of the homes in America with TV's. In contrast, the six major cigarette manufacturers spent over one billion dollars to advertise their product in 1980.[7]

The government is not the only organization providing public education on smoking and health. Organizations such as the American Cancer Society, the American Heart Association, and the American Lung Association devote a percentage of their budgets to smoking education, including the production of public service announcements. Together, all of these organizations spend less than $10 million on their smoking-related public education efforts. For example, the American Cancer Society spends approximately $8 million annually on its efforts.[8] The American Lung Association spends nearly $1 million out of its $5.5 million budget on its public education campaign.[9] These are the largest private agencies providing public education. The American Heart Association has allocated $63,500 annually to develop its informational campaign on smoking and health, exclusive of production and dissemination costs.

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[7] See Chapter II, supra.

[8] Letter from Irving Rimer, Vice-President for Public Information for ACS, to FTC (July 17, 1980).

[9] 1978-79 American Lung Association Annual Report.

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Source: https://www.industrydocuments.ucsf.edu/docs/ggnk0000

There is evidence that the current levels of public education efforts, particularly PSA's (both government and private), are ineffective. A 1976 Yankelovich study reported that only 49% of teenagers had seen at least one PSA on smoking and health within the previous month.[10] The 1978 Roper report conducted for the cigarette industry offers even more dramatic proof. Only 31% of the respondents had heard or read anything during the previous year that made them more or less worried about smoking. A mere 2% of that 31% reported that PSA's were responsible for their concern.[11] The most persuasive evidence that current educational efforts on smoking and health are inadequate is the investigation into the level of consumer knowledge detailed elsewhere in this report.[12]

In conclusion, the evidence indicates that at the present time public service announcements concerning smoking and health sponsored by both the government and private organizations appear infrequently and reach few consumers. To be effective these announcements need to appear more frequently during times when more consumers will see them.

Thus, the current public education efforts of the Office on Smoking and Health and other interested organizations are inadequate

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[10] Yankelovich, Shelley, & White Inc., Teenage Boys and Girls and Cigarette Smoking, a Supplemental, 40 (1976).

[11] 1978 Roper Report, q. 67.

[12] See Chapter III, supra.

Source: https://www.industrydocuments.ucsf.edu/docs/ggmk0000

and cannot be relied upon to remedy the problems addressed by this report. Moreover, recent budget documents submitted to Congress propose a substantial reduction in the Office on Smoking and Health's budget, further reducing its ability to educate consumers about smoking-related issues. Nonetheless, public service announcements can play a useful role in informing consumers about the health hazards of smoking. Therefore, while an increase in the number of smoking-related public service announcements is not likely to alter the need for a change in the current health warning, an increase in these announcements as part of an overall educational effort is likely to result in some increase in the public's awareness of the health hazards of smoking.

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Source: https://www.industrydocuments.ucsf.edu/docs/ggnd0080

B. Voluntary Self Regulation

The cigarette industry has not developed, and is not likely to develop, effective self-regulatory mechanisms to ensure that adequate health information is included in cigarette advertising. First, the cigarette manufacturers have never acknowledged the health hazards caused by smoking. Second, in the past the cigarette industry has agreed to take "voluntary" steps to better inform the public about the health hazards of smoking only after governmental action made it clear that the industry would be required to make these disclosures. Third, the cigarette manufacturers have not responded to concerns publicly expressed by members of Congress, by the Commission, and by concerned citizens, to limit certain aspects of cigarette advertising.

In 1964, when the Commission first considered requiring warning labels on cigarettes, self-regulation by the tobacco industry was advocated as an alternative to a Commission-mandated warning. However, the Commission found that "no industry representative has indicated that cigarette manufacturers are willing to disclose the health hazards of cigarette smoking in advertising...."[13] The willingness of the cigarette makers to disclose the dangers of smoking voluntarily appears to be no greater in 1981 than it was in 1964. Although the medical evidence on the hazards of smoking is now overwhelming, the industry continues publicly to refuse to recognize

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[13] 1964 Cigarette Rule at 8364.

Source: https://www.industrydocuments.ucsf.edu/docs/ggmk0000

the validity of this evidence.[14] The unwillingness of the cigarette industry to acknowledge the dangers of smoking coupled with the industry's aggressive attacks on the validity of the scientific evidence counsels against relying on the industry to disclose the hazards at this time.[15]

The cigarette industry has also not successfully regulated itself in the past. For example, unlike the liquor industry, cigarette manufacturers have never produced an advertisement discouraging use of their product by young people and children.[16]

The few instances of voluntary self-regulation on the part of the cigarette industry have been prompted by the existence of governmental proposals to make these actions mandatory. For example, the major cigarette manufacturers "agreed" to disclose "tar" and nicotine levels in their advertisements only after the Commission proposed a Trade Regulation Rule in 1970 that would have made it an unfair or deceptive practice to fail to do so.[17] The Commission's proposal did not cover the disclosure of "tar" and nicotine content on cigarette packages because Congress, in the Federal Cigarette Labeling and Advertising Act,[18] had retained jurisdiction over all

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[14] See Ch. I, Section II, J., supra. [Confidential Information Omitted]

[15] [Confidential Information Omitted]

[16] Blum, Commentary: Medicine vs. Madison Avenue, 243 Journal of the American Medical Association 739 (1980).

[17] See Ch. IV, Sec. I.

[18] 15 U.S.C. §§ 1331 et seq. (1970).

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Source: https://www.industrydocuments.ucsf.edu/docs/ggmk0000

health disclosures on cigarette packages.[19] Consequently, a decade later most cigarette packages still do not contain this information. Similarly, despite the Congressional requirement that all cigarette packages contain a health warning, the cigarette industry did not agree to include the same warning in its advertisments until after the Commission announced its intention to file complaints against each of the cigarette companies, alleging that advertisements without a clear and conspicuous health disclosure were "false and misleading" and constituted an "unfair practice."[20] Subsequently, problems have developed in the implementation of this agreement. In 1975, the Commission voted to seek civil penalties against the major cigarette manufacturers for violating these consent orders.[21]

The industry's only experiment with self-regulation, the Cigarette Advertiser's Code, which regulated broadcast advertising, was established in 1964 in response to the Commission's 1964 rulemaking action and ceased operation in August 1970 shortly before the congressionally-mandated broadcast ban went into effect. While some members of the tobacco industry assert that they still adhere to the principles of the code,[22] a review of current advertising

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19 See Ch. IV, Sec. I.

20 Id.

21 Id. at n. 14.

22 See, e.g., Statement of the Tobacco Institute Re S. 3118 submitted to the Subcommittee on Health and Scientific Research of the Committee on Human Resources, United States Senate, July 12, 1978.

Source: https://www.industrydocuments.ucsf.edu/docs/gqmk0000

practices[23] indicates that the code has little, if any, practical effect.

The major provisions of the 1964 Cigarette Advertisers Code limited advertising on Radio and TV to programs not "primarily" directed at children, required models to be at least 25 years old, prohibited endorsements by athletes or the association of smoking with athletic activities, and prohibited any health claims in relation to cigarettes.[24]

Problems developed with the administration of the Code from the outset. Two of the major cigarette companies, Lorillard and American Tobacco, withdrew at an early stage.[25] From the beginning the Code was also criticized for its ineffectiveness in keeping cigarette advertisements away from children.[26] As a result, the industry did agree to restrict its ads to shows where the audience under the age of 21 did not exceed 45%.[27] Even with this loosely enforced attempt, however, many children continued to be exposed to cigarette advertising.

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[23] See Ch. II.

[24] What's Ahead for the Code, Tobacco Reporter, November 1967 at 18.

[25] Lorillard withdrew in March 1966 immediately after the Commission announced that "tar" and nicotine figures could be mentioned in cigarette ads, a practice not permitted by the Code. American Tobacco withdrew in September 1967 because of the promulgation of the National Association of Broadcasters Code.

[26] Advertising Age, Sept. 27, 1965, at 1.

[27] Advertising Age, May 9, 1966, at 1.

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Source: https://www.industrydocuments.ucsf.edu/docs/gqnf0000

In 1969, the Commission evaluated the Code's effectiveness. While praising some of the Code's successes, such as removing athletes from commercials,[28] the Commission's ultimate judgment on the Code's effectiveness was negative. The 1969 Report to Congress stated:

> Whatever the policy of the NAB, the Code Authority or the CAC since April 16, 1968, the current Commission review of cigarette advertising themes as well as reviews conducted in 1964, 1967, and 1968 amply demonstrate the futility in relying upon voluntary regulation of cigarette advertising to achieve any significant changes in the content and meaning of cigarette advertising.[29]

The analysis of the current themes of cigarette advertising in this report demonstrates that little has changed in the last 11 years.

The cigarette manufacturers have also failed to respond to suggestions that more useful health information be put into cigarette advertisements. The Commission, in several of its annual reports to Congress, has made recommendations for increasing the dissemination of health information on cigarettes to the public. For example, in the 1978 report, the Commission recommended to Congress that new specific warnings replace the current warning, and that "tar" and nicotine figures be required on each package of cigarettes. The cigarette industry never responded.

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[28] F.T.C.'s Annual Report to Congress on Cigarette Advertising for the Year 1969 at 27.

[29] Id. at 30.

Source: https://www.industrydocuments.ucsf.edu/docs/ggnh0000

The National Commission on Smoking and Public Policy in its 1978 report to the American Cancer Society recommended: 1) eliminating models in cigarette advertising; 2) limiting advertising to low "tar" cigarettes; 3) including "tar" and nicotine figures on each pack; 4) ensuring that the present health warning is visible, especially on billboards, and 5) refraining from any promotion aimed at anyone under 19.[30] The report concluded:

> We believe that government, voluntary agencies and the tobacco industry should work together to discourage young people from starting to smoke. Industry spokesmen say they are willing to promote cigarettes as an "adult custom." We believe that there is danger in such promotion: too many youngsters imitate adults. If there can be agreement in principle, however, that the aim is to discourage smoking among young people, cooperation to this end should be sought.[31]

The cigarette industry has not adopted any of these proposals.

In 1979, 38 Congressmen wrote to the Commission, urging it to negotiate a self-regulation system with the cigarette manufacturers.[32] The Congressmen advocated setting up a voluntary code "prohibiting the depiction of scenes or copy implying that smoking cigarettes leads to youth, sex, manliness, femininity, courage, or glamour, [which] would be a decisive step in eliminating the exploitation of young people who are especially vulnerable to

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30 A National Dilemma: Cigarette Smoking or the Health of Americans, Report of the National Commission on Smoking and Public Policy, 1978, at 18, 51.

31 Id. at 75.

32 Letter from the Honorable Don Edwards and 37 other Members of Congress to Chairman, Federal Trade Commission (February 1, 1979).

Source: https://www.industrydocuments.ucsf.edu/docs/[illegible]

claims of this type."[33] The industry responded by denying that its advertising practices had any relation to smoking among youths. Congressman Don Edwards pursued this issue, and offered the Tobacco Institute several examples of what he considered offensive advertisements directed at young people.[34] Once again, the industry took no action.

It is particularly unlikely that the cigarette industry will voluntarily adopt a system of rotational warnings. In testimony in 1978 on proposed legislation regulating tobacco, the Tobacco Institute spoke out against rotational warnings. The Institute had three concerns. First, it felt that specific warnings would be misleading and counterproductive. Second, it argued that there is no need for additional information. Third, it feared that collecting the warnings could become a teen hobby.

In light of the cigarette industry's position that smoking does not pose a hazard to health, that its current advertising practices do not pose any problems, and that the public is already well-informed, combined with the industry's failure to regulate itself effectively in the past, voluntary industry self-regulation does not appear to be a reasonable alternative as a remedy to the current problems in cigarette advertisements.

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33 Id.

34 Letter from Honorable Don Edwards to Horace R. Kornegay, President, Tobacco Institute (August 30, 1979).

Source: https://www.industrydocuments.ucsf.edu/docs/ggmk0000

C. Alteration of the Shape and Size of the Warning

One of the major deficiences of the current warning is that very few people notice or read it. A contributing factor to this problem is the fact that for the past nine years the current warning has appeared in cigarette advertisements in the same, small rectangle.[35] Therefore, as part of this investigation staff examined whether altering the shape and size of the warning format would improve its noticeability and effectiveness. After a careful examination of the available evidence staff believes that a change in both the size and basic shape of the warning symbol would substantially improve its effectiveness. However, it should also be stressed that, although a change in the shape and an increase in the size of the current warning would increase its noticeability, these changes would not eliminate the need to communicate additional information about the health consequences of smoking to consumers. This remedial option, therefore, should be considered in addition to, and not instead of, any of the informational remedies discussed.

1. Shape of the Warning

To test whether altering the shape of the warning would improve its noticeability and effectiveness, staff commissioned Burke Marketing Research, Inc.[36] to conduct a "focus group"

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[35] See, Ch. IV, Sec. II.

[36] Burke, Exploratory Print Focus Groups, January, 1980.

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Source: https://www.industrydocuments.ucsf.edu/docs/ggnk0000

study[37] to gauge consumer reactions and attitudes towards several proposed shapes. The shapes were developed by Keenan and McLaughlin, a New York advertising agency. Of the nine shapes tested, two -- an eight-sided figure (octagon) half black and half white, and an arrow pointing into a circle -- emerged as the most likely to be noticed and understood.[38]

These two shapes were then further tested against each other and the currently used rectangle in a Portfolio Study conducted by Burke in June and July, 1980.[39] As part of this study interviews were conducted in shopping malls in six different cities across the nation. Overall, 1228 respondents were tested for aided and unaided recall of ads containing three different warnings[40] in four shapes:

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[37] The focus groups were drawn from groups in the population from whom we sought answers to our questions about the relative effectiveness of various shapes, i.e., smokers and nonsmokers and persons of varying age and sex. There was no representative selection of these people, so no statistical inferences can be drawn. Focus groups are, however, a commonly used technique in marketing research. They are a series of small-group discussions with a trained moderator designed to gather information to clarify existing theories, redirect efforts away from previous expectations, generate new ideas, and give direction to future research.

[38] The nine tested formats included the following: 1) an octagon that was half black and half white; 2) an all white octagon; 3) a white octagon with a band of black across the middle; 4) an arrow pointing into a circle; 5) a plain circle; 6) a circle surrounded by a square; 7) a circle that was half black and half white; 8) a square; and 9) a rectangle. See Appendix B for illustrations.

[39] Burke, Cigarette Print Ad Portfolio Study, November 1980 (Burke Portfolio Study).

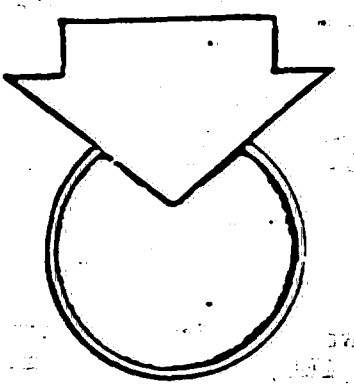
[40] The warnings included the present Surgeon General's warning and two additional ones: "Lung Cancer: The Major Cause Is Smoking," and "Heart Attack: A Major Risk Factor Is Smoking."

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Source: https://www.industrydocuments.ucsf.edu/docs/gpwk0000

the octagon, the circle and arrow, the current rectangle, and an enlarged rectangle.

Burke concluded that, overall, the circle and arrow and the octagon were noticed more often,[41] and yielded significantly greater unaided recall than the rectangle shape.[42] Total recall, both aided and unaided, of each of the warning messages was highest for the three warnings tested in the circle and arrow.[43] The company reported that the circle and arrow was superior to all the other shapes, including the octagon, in prompting mentions of the contents of the warning messages.[44] In sum, the circle and arrow shape was superior to all other shapes tested.[45] The currently used rectangle, on the other hand, consistently scored the lowest in terms of noticeability and recall.[46] Thus, staff recommends using the following circle and arrow format for the proposed rotational warnings:



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41 Burke Portfolio Study at 1.

42 Id., at 2. Unaided recall of a new lung cancer message in the circle and arrow reached 64%, while unaided recall of the present warning, which has been on packages since 1969 and in advertising since 1972, in its existing shape, was only 28%.

43 Id., at 8, 12.

44 Id., at 4.

45 Id., at 2, 4, 6, 8.

46 Id, at 4, 6, 8.

Source: https://www.industrydocuments.ucsf.edu/docs/gqdd0000

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2. Size of the Warning

Part of the reason very few people notice the current warning is its small size. The other shapes tested by Burke, which were 50% larger than the existing rectangle, were all found to be more noticeable. A heart attack warning presented in the current rectangle was recalled, unaided, by only 33% of respondents,[47] one of the lowest showings of any format tested. By contrast, the same message when tested in a somewhat larger rectangle was recalled, unaided, by 38% of respondents.[48] The nonrectangular shapes, both of which were 50% larger in area than the present rectangle, scored significantly higher in every catagory than the present rectangle. For example, the same heart attack message that was recalled unaided by only 33% of those tested when presented in the current rectangle was recalled, unaided, by 57% when presented in the circle and arrow.[49]

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47 Id., at 2. The current warning in the current rectangle had an unaided recall score of only 28%, the lowest score. The 28% score cannot be compared with the noticeability score obtained from the Starch test results, supra, Ch. IV, Sec. II. While Starch tested actual readership of ads by consumers when not in a test-taking situation, Burke asked participants to review the ads in question as part of a test of recall of the ad in which the participant had agreed to participate before reviewing the ad.

48 Id.

49 Id., at 4, 6, 8. Tests were conducted for unaided recall, total (aided) recall, first recall, and recall of the specific content of the warnings tested. Several warnings were tested in each shape. Regardless of the nature of the recall being tested, or the content of the warning, the larger non-rectangular shapes tested better than the current rectangle.

Source: https://www.industrydocuments.ucsf.edu/docs/gpbk0000

Preliminary data, therefore, seem to indicate that an increase in the size of the health warning would improve its noticeability. At this point staff makes no recommendation as to the precise dimensions of a new warning symbol. Additional research and public comment is needed to clarify exactly what size offers maximum increased effectiveness without imposing undue costs or taking up an undue amount of space. The warning should be large enough to be noticed, but small enough to permit the advertiser to communicate its desired message.

The only potentially significant cost of the proposed change is the cost to the manufacturer for the increased advertising space occupied by a warning if it is larger than the current warning. The use of this space, which might otherwise be used for the advertisement message, may be considered as imposing a cost on the manufacturer. Until the precise size of any new warning is selected, it is impossible to compute the exact cost of any increase in size. It should be noted that the cost is not necessarily proportional to the amount of space used in the ad and that the computation of the costs would be affected by a number of factors, such as the degree of flexibility permitted the advertiser to choose the symbol's location within the ad or whether the warning occupies space needed to communicate the advertiser's commercial message. Of course, as long as a new warning is not so large as to require manufacturers to buy bigger ads to communicate the same message, there is no increased out of pocket expenditure to the cigarette manufacturers. In addition, as long as the new warning continues to occupy only a small percentage of the space in print media, sidewalk, transit and point of purchase ads and does not occupy space needed to communicate the

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manufacturers' message, the increased cost in terms of lost space to the manufacturers is not likely to be substantial.

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Source: https://www.industrydocuments.ucsf.edu/docs/ggmk0000

D. Single New Warning

One option to remedy the problems described in this report is to replace the current warning with a single, more detailed warning. For nearly a decade the Commission has been advocating that the current warning should be replaced by a more detailed, more specific health warning. In every Report to Congress filed by the Commission since 1972 pursuant to the Federal Cigarette Labeling and Advertising Act, the Commission has recommended that the current warning be replaced by the following message:

> WARNING: CIGARETTE SMOKING IS DANGEROUS TO HEALTH, AND MAY CAUSE DEATH FROM CANCER, CORONARY HEART DISEASE, CHRONIC BRONCHITIS, PULMONARY EMPHYSEMA AND OTHER DISEASES.[50]

In its 1976 and 1977 Reports, the Commission also informed Congress that the American Cancer Society's Board of Directors had approved a recommendation that the warning on cigarette packages and advertisements be amended to read:

> WARNING: CIGARETTE SMOKING IS A MAJOR HEALTH HAZARD AND MAY RESULT IN YOUR DEATH.

The Commission added that it believed that either of these warning statements "would constitute a desirable improvement in the warning being given to consumers."[51]

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[50] See, 1972, 1973, 1974, 1975, 1976, 1977 and 1978 FTC Reports to Congress pursuant to the Federal Cigarette Labeling and Advertising Act. See Appendix E for a sample of this warning in an advertisement format.

[51] 1976, 1977 FTC Reports to Congress pursuant to the Federal Cigarette Labeling and Advertising Act.

Source: https://www.industrydocuments.ucsf.edu/docs/ggmk0000

There are a number of advantages to replacing the current warning with a new, more specific warning. First, consumers have indicated that they prefer a more detailed warning. In the 1978 Roper Study conducted for the Tobacco Institute, consumers were asked whether they favored a warning identical to the one proposed by the Commission in its 1978 Report to Congress or the current warning. Sixty-one percent of those polled and 69% of the non-smokers polled favored the proposed new warning.[52] Only 34% of those polled and 26% of the non-smokers favored the current warning.[53]

Second, a new warning identical or similar to the warning the Commission has recommended to Congress in the past would be both more concrete and more informative than the current warning. Not only does the warning the Commission proposed inform consumers about the relationship between smoking and cancer, heart disease, chronic bronchitis and emphysema, it informs consumers that they can die from these smoking-related illnesses. Each of these facts provides consumers with additional information needed to evaluate the overall health risks of smoking. In addition, as was noted in Chapter IV, one of the factors contributing to the current warning's ineffectiveness is its abstract and general nature. The inclusion of the names of four of the specific smoking-related diseases and the fact that there is a risk of dying from these diseases makes the warning both more specific and more concrete.

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52 1978 Roper, q. 25.

53 Id.

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Source: https://www.industrydocuments.ucsf.edu/docs/ggmk0000

The third advantage to replacing the current warning with a new, more informative warning would be derived from the very fact that for at least some period of time, it would be perceived as being new. The fact that the old warning has not been changed for a decade has contributed to its ineffectiveness.[54] It is "worn out" and no longer communicates any new information to most consumers. Therefore, any change in the current warning, especially one that communicates new information to consumers, is likely to improve on the warning's noticeability and effectiveness for some period of time.

Thus, as the Commission has recognized since 1972, a single new more specific warning has numerous advantages over the current warning. It also appears that the current warning could be replaced with a single new warning without substantial cost or additional administrative burden to cigarette manufacturers or their advertising agencies. As long as the timing of the implementation of the new warning is coordinated with the cigarette industry's introduction of new advertising, replacement of the current warning with a new single warning would not add substantial additional production or administrative costs. Therefore, if the current warning were replaced, cigarette manufacturers should be given adequate prior notice to permit them to include the new warning in any advertising campaign scheduled to begin before and run beyond the formal implementation date in order to minimize the costs involved.

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[54] See Chapter IV, Section II. It should also be reemphasized that a change in the shape and size of the warning format, as recommended above, would increase the novelty and improve the effectiveness of a new warning message.

Source: https://www.industrydocuments.ucsf.edu/docs/ggmk0000

While there are numerous advantages to a single, new, more specific warning over the current warning, the merits of this change also need to be compared with the merits of replacing the current warning with the system of rotational warnings discussed subsequently in this report. When compared with a system of rotational warnings, a single new warning has three major drawbacks. First, any single warning is capable of effectively communicating only a limited amount of information. Although the warning proposed by the Commission in its annual reports to Congress is longer than the current warning, it, too, omits a substantial amount of significant, material health information. For example, the proposed warning contains no information about the risks of smoking by pregnant women or the increased dangers of smoking for women who also take birth control pills, or for individuals with pre-existing medical conditions which are aggravated by smoking. It does not inform consumers that low "tar" and nicotine cigarettes have not been proven to be safe or that smoking less than a pack of cigarettes each day is dangerous. The proposed warning also does not mention that many experts have concluded that smoking is addictive, a particularly important fact to a non-smoking consumer deciding whether to experiment with cigarettes, or that cigarette smoke contains carbon monoxide and numerous additives, some of which are known carcinogens. Similarly, the proposed warning does not indicate whether the increased risk of heart attack, cancer, emphysema or chronic bronchitis is large or small, nor does it indicate whether the risk of death from these smoking-related diseases is substantial

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Source: https://www.industrydocuments.ucsf.edu/docs/ggmk0000

or insignificant. In contrast, a system of specific rotational warnings is capable of communicating as much health information as the Commission or Congress deems appropriate and necessary.

The second drawback to a single new warning when compared to a system of rotational warnings relates to the length of the warning message. The current warning is 14 words long. The warning previously proposed by the Commission is 23 words long. If the current use of the name of the Surgeon General is retained in the proposed warning, the warning would be 28 words long. If the proposed warning were redrafted to include additional health information, its length would increase further, and even then, it is unlikely that a single warning could be drafted which would include substantially more health information than the proposed warning.

Increasing the length of the health warning has several implications. A longer warning would take up more space in the ad. On billboards this poses a particularly serious problem. In 1975, the Commission filed a case seeking civil penalties against the six major cigarette manufacturers. The complaint was amended in 1976 to allege that the size of the lettering of the current warning in billboards violated the 1972 consent agreement which requires that the warning be "clear and conspicuous." U.S. v. R.J. Reynolds Tobacco Company, 76 Civ. 813 (S.D.N.Y.). In this still pending action, the Commission has urged that to be "clear and conspicuous" to the average viewer of a billboard from the distance at which the billboard is normally seen, the size of the letters of the warning needs to be substantially increased. The average billboard is viewed at distances ranging from 100 to 400 feet. The Institute of Outdoor

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Source: https://www.industrydocuments.ucsf.edu/docs/ggmk0000

Advertising states that all outdoor advertisements should be designed so that they will be legible at distances up to 400 feet.[55] Thus, to be legible on a billboard, a warning approximately twice as long as the current warning would have to occupy a substantial amount of a billboard's advertising space.

The length of the warning also has an impact on its effectiveness. Informational disclosures, especially on billboards, need to be brief, simple and concise to be most effective.[56] The Commission's recent task force on Consumer Information Remedies concluded, "when providing or requiring information disclosures, it should be remembered that consumers generally have limited processing capacities, which preclude them from being able to use 'too much' information."[57] Therefore, the task force concluded that in drafting an informational remedy, caution must be taken to avoid overloading consumers' short term memory.[58] Two recent studies conducted for the F.T.C. support this conclusion.

In a 1980 focus group interview study conducted by Burke Marketing Research, Inc. to evaluate the effectiveness of a number of different cigarette health warnings and warning formats, the researchers concluded that complex warnings that contained more than

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55 Institute of Outdoor Advertising, A Creative Guide to Outdoor Advertising, at 6, 14.

56 Id.; F.T.C., Consumer Information Remedies: Policy Review Session (June 1979).

57 Id. at 103.

58 Id.

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Source: https://www.industrydocuments.ucsf.edu/docs/ggmk0000

one idea were more difficult for consumers to understand.[59] In a second study, Walker Research, Inc. evaluated three variations of twelve different health warnings to determine which of the three variations was easiest to understand and which provoked the most thought about the health effects mentioned. While the study was not explicitly designed to test the impact of the length of a health warning on its effectivness, a review of the results indicates that the more simple and more direct warnings consistently scored better.[60] Among the warnings tested by Walker was the warning previously proposed by the Commission in its reports to Congress. This warning was tested against the following two shorter warnings:

"Smoking Causes Cancer of the Lungs, Larynx, Mouth and Esophagus"

"Cigarette Smoking Can Cause Death From Cancer, Heart Disease or Lung Disease."

Both of these warnings scored better than the warning previously proposed by the Commission in both understandability and ability to provoke thought about the health effects of smoking. In each case the warning which read, "Cigarette Smoking Can Cause Death From Cancer, Heart Disease or Lung Cancer," scored significantly higher than the longer warning previously proposed by the Commission.

The third drawback to a single new warning is that it would have many of the same problems which are responsible for the

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[59] Burke Marketing Research, Inc., Exploratory Print Focus Groups (January 1980), at 6, 11.

[60] Walker Research, Inc., Health Warning Statement Concept Evaluation, (November 1980).

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Source: https://www.industrydocuments.ucsf.edu/docs/ggmk0000

ineffectiveness of the current warning. Once in place, the new warning would not be changed. Therefore, it would become "overexposed" and "wornout" much more rapidly than would warnings included in a rotational warning system. The novelty of the new warning would also wearout more quickly than would rotational warnings. The decrease in novelty would make it less noticeable, less memorable, and less likely to be used by consumers in making smoking decisions. Concerns about keeping the warning short enough to be understood may also affect how concrete the message can be. Rather than disseminating the data on the hazards of smoking through a series of short, concrete, easily personalizable messages, a new single warning might be more general. In so doing, it may become more abstract, and therefore, less effective.

Finally, a preliminary investigation of the relative cost of a single new warning versus a system of rotational warnings indicates that there may not be a significant difference. When the rotational warning and the ad are produced at the same time, and no changes in the warning need be made, the ad should cost no more to produce than it would at the present time. An increase in production cost should also be incurred only when a particular ad runs for longer than the time specified for the particular warning. The difference in the administrative costs between the operation of a reasonable rotational system and a single new warning should also not be substantial. Preliminary research also indicates that once the ad has been produced, and the proper warning message inserted, the primary added cost should be the additional time it takes to monitor the schedule to ensure the correct warning is in the advertisement.

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Source: https://www.industrydocuments.ucsf.edu/docs/ggmk0000

E. Rotational Warnings

Although a change in the shape and an increase in the size of the current warning, as proposed previously in this Chapter, would temporarily increase its noticeability, these changes would not by themselves remedy the problems in cigarette advertising. The current warning is worn out and provides no specific health information. Therefore, the content of the current warning needs to be changed. As was previously noted, a single new warning, even if more specific, would not adequately cure the problem caused by the public's gap in knowledge, nor would it overcome all of the underlying causes of the current warning's ineffectiveness.

Therefore, staff has evaluated the merits of a rotational warning system containing a number of short, specific, easily understandable warnings which would rotate among cigarette ads on a regular basis, perhaps quarterly. A system of rotated health disclosures would make it possible to provide consumers with sufficient health information to assess the risks of smoking and determine whether these health risks have any personal relevance to themselves. In addition, rotation of the warning would help eliminate the underlying causes of the present warning's failures.[61]

First, a rotational warning system would provide sufficient repetition of each message to contribute to long term recall of that message, while decreasing the likelihood that any one message would become so familar and so overexposed that its effectiveness would

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[61] See Ch. IV, Sec. II, supra.

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Source: https://www.industrydocuments.ucsf.edu/docs/ggmk0000

"wear out."[62] Second, the use of a number of different, specific warnings that are rotated regularly would assist in maintaining the novelty of each warning. Moreover, the use of a number of different warnings, which would vary from brand to brand at any one time and which would regularly change, would make it more likely that consumers would consider the content of the warning message because novel information is not only more noticeable, it is more likely to be spontaneously recalled.[63] Third, the warnings in a rotational warning system would be shorter, more specific and more concrete than the current warning. It has been shown that concrete information is more easily transformed into mental images by consumers and is better remembered than abstract information. Studies have also shown that people rely on concrete information more than on abstract information.[64] Fourth, information which consumers perceive as having personal relevance is more likely to be noticed and remembered. The evidence indicates that information which is specific and concrete is more likely to be perceived as being personally relevant.[65] Therefore, a series of concrete,

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62 See, Craig et al., Advertising Wearout: An Experimental Analysis, J. of Marketing Research (Nov. 1976).

63 Cohen & Srull, Information Processing Issues Involved in the Communication and Retrieval of Cigarette Warning Information, Report prepared for the Federal Trade Commission, November 1980 at 12.

64 Id., at 20.

65 Rodgers, Kuiper & Kirker, Self Reference and the Encoding of Personal Information, 35 Journal of Personality and Social Psychology, 677-88 (1977).

Source: https://www.industrydocuments.ucsf.edu/docs/ggmk0000

personalized rotating warnings would be more likely to be accessible, to be spontaneoulsly recalled, and to become part of consumer decision-making than the present warning.

The concept of rotational health warnings in cigarette advertising is not new. The Swedish government instituted a system of rotational health warnings in early 1977.[66] While the Swedish system's long-term impact cannot yet be measured, some preliminary research conducted by the Swedish National Smoking and Health Association led that organization to conclude that the new system has increased consumer knowledge and has had a beneficial impact on smoking behavior in that country.[67]

1. Content of the Health Warnings

The health warnings ultimately selected should be evaluated according to four criteria. They should be medically accurate, fill a demonstrable gap in consumer knowledge about the health hazards of smoking, be understandable, and prompt consumers to think about the health hazards of smoking.

The sample warnings suggested by the staff have been evaluated for their accuracy by the leading medical experts in the particular field of expertise. Each is supported directly by statements and conclusions of the 1979, 1980 and 1981 Surgeon General's Reports, or

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[66] The Swedes rotate sixteen warnings. See Appendix C.

[67] Staff recognizes that there are a number of differences between the U.S. and Sweden that make it impossible to state that their experience with rotational warnings would be comparable to ours. Nonetheless, their experience is instructive.

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Source: https://www.industrydocuments.ucsf.edu/docs/gqmb0000

by the underlying studies relied on in those reports. Furthermore, each warning concerns a serious health hazard affecting a substantial portion of the population.

Each sample warning also provides information about the health hazards of smoking about which there is a significant, demonstrable gap in consumer knowledge. The suggested new warnings, therefore, were tailored to the results of this report's assessment of the level of consumer knowledge about smoking.[68]

Staff also recognized the need to present the information in a manner that is both understandable and that prompts consumers to consider the health effects of smoking. Therefore, Walker Research, Inc., was commissioned to help develop sample warnings that met these two criteria. Walker conducted a nationally projectable shopping center intercept survey, in August and September 1980, in three cities in different parts of the country. Overall, 805 persons were asked to evaluate 36 proposed warnings -- 3 different warnings for each of 12 medical "concept" or fact areas -- as to their "understandability" and "ability to prompt people to think about the health effects of smoking."[69]

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[68] See Ch. III, supra.

[69] Walker Research, Inc., Health Warning Concept Study, Nov. 1980. Respondents were asked to rank the three proposed warnings in each concept area in terms of which made them "think most about the health effects of smoking." Respondents were also asked to rank the warnings in each concept area as to how easy they were to understand. In addition, respondents were asked to explain why they ranked the concepts the way they did, and their explanations were recorded verbatim.

Source: https://www.industrydocuments.ucsf.edu/docs/ggmk0000

Based in part on the Walker results and after careful consideration of all of the four criteria explained above, warnings along the following lines are suggested as illustrative of the types of warnings the Commission might consider.[70] It should be emphasized that the following have not all been thoroughly tested and are offered solely as illustrations of the type of warnings which might be included in a system of rotational warnings. (The capitalized words should appear in the arrow section of the shape, with the rest of the warning in the circle. See Appendix E for illustration of sample warnings in an advertisement format.)

a.	WARNING:	Smoking causes death from cancer, heart attack and lung disease.
b.	LUNG CANCER:	Smoking is the major cause.
c.	LUNG CANCER:	Most of its victims die within one year.
d.	LUNG CANCER:	8 out of 10 cases are caused by by smoking.
e.	HEART ATTACK:	The number one cause of death from smoking.
f.	HEART ATTACK:	Smoking is a major cause.
g.	CHRONIC BRONCHITIS AND EMPHYSEMA:	Most cases are caused by smoking.

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[70] For several major subject areas, multiple warnings are suggested. In many subject areas, it is important that more than one warning be provided, although it is unlikely that all of the warnings suggested for a particular subject will be included. The precise content and number of warnings should be properly determined only after analysis of public comments and additional data developed in the future.

Source: https://www.industrydocuments.ucsf.edu/docs/ggmk0000

h.	LUNG DISEASE:	The more you smoke, the more likely you are to die from chronic bronchitis or emphysema.
i.	PREGNANT WOMEN:	Smoking increases the risk of spontaneous abortion and stillbirth.
j.	PREGNANT WOMEN:	Smoking increases the risk of death of your unborn child.
k.	WOMEN:	If you take the "pill", smoking greatly increases your risk of heart attack.
l.	CARBON MONOXIDE:	Cigarette smoke contains carbon monoxide and other poison gases.
m.	TEENS:	The earlier you start, the more likely you are to die from smoking.
n.	WARNING:	Smoking may be addictive.
o.	LIGHT SMOKERS:	Even a few cigarettes a day are dangerous.
p.	SMOKERS:	No matter how long you have smoked, quitting greatly reduces your health risks.

The expense of the rotational warning system remains approximately the same whether three, four, or sixteen health warnings are required.[71] The primary cost that increases as additional warnings are required is the minor production cost associated with printing the additional warning.

To evaluate the costs and burdens of a rotational warning system, experts from an advertising agency have been consulted about how such a system could operate. Among the issues they have addressed include: (1) How frequently should the warnings be rotated in light

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[71] Keenan & McLaughlin, Inc., Cigarette Warning Project, 1981.

Source: https://www.industrydocuments.ucsf.edu/docs/gpmk0000

of current advertising practices to provide for adequate exposure for each warning at a reasonable cost? (2) Should all brands carry the same warning at the same time or should warnings be rotated on a brand-by-brand or company-by-company basis? (3) How would the system operate in the print media, on sidewalk posters and transit placards, on give-away items and point-of-purchase advertising material, and on outdoor billboards? A discussion of how a rotational warning system might operate based upon the staff's preliminary investigation into this issue is included in Appendix D.

2. Costs Of Implementation Of Rotational Warning System

Staff has, with the consultation of our advertising agency, attempted to design the rotational warning system to keep costs to a minimum. To reduce the costs of a rotational system, its implementation should be coordinated with the cigarette industry's introduction of new advertising. In this way, the advertisers could add the new warnings to advertisements in the preproduction stage, rather than replace the current warning in an existing ad.

Most of the cost of the proposed system would be in the actual production of the ad. When the warning and the ad are produced at the same time, and no changes in the warning need be made, the ad should not cost more to produce than it would at the present time. The increase in production cost would be incurred only when a particular ad runs for more than the specified period selected and the warning must be replaced. If an ad overlaps the specified period, it appears that changing the warning in the production material of one 4-color magazine ad would cost approximately between $40-$245; changing a newspaper ad would cost approximately $150.

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Source: https://www.industrydocuments.ucsf.edu/docs/gqnc0000

These costs are not substantial given the total cost of producing an advertisement. By rotating messages quarterly, rather than monthly as was once considered, the increased production costs should also be reduced.

Preliminary research also indicates that the administrative costs of operating the proposed system should not be unduly large. Most of the non-production costs of advertising appear to come in the initiation and creation of an ad campaign. The rotational system should not have a major effect on these costs. Once the ad has been produced, and the proper warning message inserted, the primary added cost should be the additional time it takes to monitor the schedule to ensure the correct warning is in the advertisement. This monitoring should not involve substantial time. The advertising agencies' traffic manager already prepares "schedule flow charts" indicating what advertisement runs in what publication. The primary administrative task imposed by the rotational system would appear to be that the traffic manager would have to keep track of the rotation schedule to see whether the proper warning had been inserted in each ad. If the ad does not overlap rotational periods in any publication, the administrative cost does not appear to be substantial. Minor changes in ads presently are handled routinely, so the burden of keeping track of the rotational system also should be very small. In addition, rotation by brands should not pose a significant burden because each brand produces its own advertisements.

In conclusion, the system described above could provide consumers with additional information about the dangers of smoking at a reasonable cost to the cigarette manufacturers.

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Source: https://www.industrydocuments.ucsf.edu/docs/ggmk0000

F. "Tombstone" Advertising

The use of imagery is one of the most powerful techniques available to cigarette advertisers. As discussed above,[72] persuasive imagery in cigarette advertising may divert attention away from the health warning. Consequently, France limits the use of imagery in cigarette advertising and allows only the pack of cigarettes advertised to be shown: so-called "tombstone advertising."

Staff believes that limiting the use of imagery in cigarette advertising might significantly reduce the deceptive capacity of those ads. However, this remedy would not provide consumers with information about the hazards of smoking,[73] and may raise potential First Amendment questions. In addition, adoption of an effective informational remedy would correct any current deception by omission in cigarette advertising. Therefore, staff recommends that this remedy not be adopted and not be considered further at this time.

100052431

[72] See Ch. IV, Sec. II.

[73] Only an informational remedy can correct consumer misinformation by affirmatively disclosing material facts.

Source: https://www.industrydocuments.ucsf.edu/docs/ggmk0000

G. Disclosure of Carbon Monoxide Levels

Another remedy considered by the staff is the disclosure in cigarette advertising of the levels of carbon monoxide gas in the smoke of each brand of cigarettes. Carbon monoxide is one of the most harmful ingredients of cigarette smoke. It causes adverse health effects by reducing the blood's ability to carry oxygen to the cells. Carbon monoxide exacerbates the symptoms of heart disease and chronic obstructive lung disease. CO in cigarette smoke is especially harmful to the developing fetus. Many, if not most, of the instances of prenatal death, complications of pregnancy and long term developmental problems that are associated with smoking are thought to result, at least in part, from the effects of CO. Despite the dangers of carbon monoxide, many people are unaware of its presence in cigarette smoke. In the 1980 Roper Study, 53% of the total sample and 56% of smokers did not know that cigarette smoke contains carbon monoxide.[74]

There are two possible methods for better informing consumers about the presence of carbon monoxide in cigarette smoke. First, if a system of rotational warnings is adopted, a warning informing consumers about the existence of and dangers resulting from carbon monoxide in cigarette smoke should be included. One of the disadvantages to replacing the current warning with a single new

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[74] 1980 Roper, q. 30: "Cigarette Smoke contains carbon monoxide, which is a dangerous gas." Total: 31% "Don't know if its true," 13% "think it's not true," 10% "Know it's not true." Smokers: 24% "Don't know if it's true," 19% "Think it's not true," 13% "Know it's not true."

Source: https://www.industrydocuments.ucsf.edu/docs/ggmk0000

warning is that it is unlikely that the warning could be drafted to include this information. Second, CO levels could be disclosed in the same manner that "tar" and nicotine levels are now disclosed in cigarette advertising. The disclosure of CO levels for each cigarette brand might be relevant to consumers in choosing between brands, would highlight the fact that cigarette smoke contains carbon monoxide, and might stimulate competition that would encourage development of low CO cigarette advertising.

The FTC recently tested different brands of cigarettes for levels of CO.[75] Initial published test results may show a high correlation between CO levels and "tar" and nicotine levels, once a correlation analysis is made. On the other hand, even if there is significant correlation between CO levels and "tar" and nicotine levels, the degree of correlation may vary from cigarette to cigarette. In that case, disclosure of CO levels would provide consumers with useful, additional information. Therefore, it is suggested that this issue needs further study before a recommendation can be made.

1005052433

75 F.T.C., Report of "Tar", Nicotine and Carbon Monoxide of the Smoke of 187 Varieties of Cigarettes. March, 1981.

Source: https://www.industrydocuments.ucsf.edu/docs/ggmk0000

III. LEGAL BASIS FOR PROPOSED REMEDIES

A number of options to remedy the problems discussed in this report have been presented in this Chapter. If at any time the Commission decides to take some action, it is necessary to examine the legal implications of each remedial option it is likely to seriously consider.

A. Proposed Remedies are Reasonably Related to the Elimination of the Deceptive Practices

The Commission has broad remedial authority to enforce Section 5 of the Federal Trade Commission Act. In recognition of the agency's special competence in dealing with trade practice problems, Congress delegated primary responsibility for fashioning remedial orders to the Commission[76] and gave it wide latitude in choosing among alternative remedies to redress violations of its Act,[77] as long as its solutions are reasonably related to the removal or prevention of an unlawful practice.[78]

Affirmative disclosures have repeatedly been found reasonably necessary to cure violations stemming from the failure of advertisements to reveal material facts in advertising.[79]

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76 "The Commission is the expert body to determine what remedy is necessary to eliminate the unfair or deceptive trade practices...." Jacob Siegel Co. v. F.T.C., 327 U.S. 608, 612 (1946).

77 FTC v. Ruberoid Co., 343 U.S. 470, 473 (1952); See, e.g., FTC v. Cement Institute, 333 U.S. 683, 726 (1948).

78 E.g., Jacob Siegel Co. v. FTC, 327 U.S. at 613.

79 Warner-Lambert Co. v. FTC, 562 F.2d 749 (D.C. Cir. 1977), cert. denied, 435 U.S. 950 (1978); J.B. Williams Co. v. FTC, 381 F.2d 884, 891 (6th Cir. 1967); Waltham Watch Co. v. FTC, 318 F.2d 28, 32 (7th cir, 1963), cert. denied, 375 U.S. 944 (1963).

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Source: https://www.industrydocuments.ucsf.edu/docs/[illegible]

Moreover, the Commission has indicated that affirmative disclosures are "especially appropriate" in cases, such as this one, involving public health and safety.[80] In fact, affirmative disclosures, such as detailed health warnings, have been required in numerous instances in which the Commission has found advertisements deceptive for containing misleading health and safety claims or for failing to reveal health and safety related facts regarding product use.[81]

In this case, staff has made great efforts to ensure that the remedies discussed are "reasonably related" to any deception in cigarette advertising. Staff has reviewed the existing data concerning consumer knowledge of the health hazards of smoking, and has commissioned studies of its own to assess consumer knowledge. Based on this accumulated data, the single warning and rotational warnings discussed were carefully tailored to remedy the important gaps in consumer knowledge of the health effects of smoking. In addition, staff has tested various warning messages and shapes for

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80 See Firestone Tire and Rubber Co., 81 F.T.C. 398, 451-452 (1972), aff'd, 481 F.2d 246 (6th Cir. 1973), cert. denied, 414 U.S. 1112 (1973); American Home Products Corp., 70 F.T.C. 1524, 1605 (1966); Kirchner v. FTC, 337 F.2d 751, 753 (9th Cir. 1964); Moretrench Corp. v. FTC, 127 F.2d 792, 795 (2d Cir. 1942); 1964 Cigarette Rule at 8354.

81 Positive Products Co., 33 F.T.C. 1327, 1335, aff'd sub nom. Aronberg v. F.T.C., 132 F.2d 165 (7th Cir. 1942); American Medicinal Products Inc., 32 F.T.C. 1376, aff'd, 136 F.2d 426 (9th Cir. 1943); Warner-Lambert Co. v. F.T.C., 562 F.2d 749 (D.C. Cir. 1977) see also, the discussion in Firestone Tire and Rubber Co., 81 F.T.C. at 462-74.

Source: https://www.industrydocuments.ucsf.edu/docs/gmxk0000

both effectiveness in communicating information and understandability, see, Ch. V, Sec. II, supra. It has consulted with social scientists and marketing experts in this regard. Finally, an advertising agency has worked closely with staff to insure that the informational remedies discussed in this report are feasible, effective, and can be implemented at minimal cost and burden to the industry.

In sum, the informational remedies discussed are directly related to the ineffectiveness of the current warning and the consumers' lack of specific knowledge concerning the health hazards of smoking. As such, they are "reasonably related" to the possible deception in current cigarette advertising, and the Commission has the legal authority to require them.[82]

B. Proposed Remedies are Consistent with the First Amendment

Government regulation designed to cure deceptive advertising is consistent with the First Amendment to the Constitution. In fact, warnings and affirmative disclosures such as those proposed by staff further the First Amendment interest in increasing the amount of truthful information available to consumers.

Several recent Supreme Court cases illustrate these principles. In the landmark case, Virginia State Board of Pharmacy v. Virginia Citizens Consumer Council, Inc., 425 U.S. 748 (1976), the Court stated:

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82 The "reasonable relation to deception" is applicable whether the Commission proceeds via adjudication or rulemaking. See § 18(a)(1)(B) of the Magnuson-Moss Warranty - F.T.C. Improvements Act, 15 U.S.C. § 2031, et. seq.

Source: https://www.industrydocuments.ucsf.edu/docs/ggmk0000

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> ...[M]uch commercial speech is not provably false, or even wholly false, but only deceptive or misleading. We foresee no obstacle to a State's dealing effectively with this problem. The First Amendment, as we construe it today, does not prohibit the State from insuring that the stream of commercial information flow cleanly as well as freely. 425 U.S. at 771-772 (emphasis added).

In a significant footnote, the Court added that:

> ...[it may be] appropriate to require that a commercial message appear in such a form, or include such additional information, warnings, and disclaimers, as are necessary to prevent its being deceptive. Id. at 772, n. 24 (emphasis added).

In Bates v. State Bar of Arizona, 433 U.S. 350 (1977), the Court also made clear that requiring affirmative disclosures to cure advertising deception does not offend the First Amendment. In overturning a prohibition on advertising by attorneys, the Court acknowledged that the state bar "retains the power to correct omissions that have the effect of presenting an inaccurate picture," and emphasized that "the preferred remedy is more disclosure, rather than less."[83] Again, the Court was careful to note that warnings or disclaimers could be required if necessary to assure that the consumer is not misled.[84]

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[83] 433 U.S. at 375.

[84] See also, Warner-Lambert Co. v. F.T.C., 562 F.2d 749 (D.C. Cir. 1977), in which the D.C. Court of Appeals had occasion to measure a Federal Trade Commission corrective advertising order against the First Amendment. The Court approved the Commission

(Continued)

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Source: https://www.industrydocuments.ucsf.edu/docs/gpnk0000

Most recently, in Central Hudson Gas and Electric Corporation v. Public Service Commission, 447 U.S. 557 (1980), the Court confirmed that government regulation of potentially deceptive advertising is not prohibited by the First Amendment. The Court wrote:

> The First Amendment's concern for commercial speech is based on the informational function of advertising. [Citation omitted.] Consequently, there can be no constitutional objection to the suppression of commercial messages that do not accurately inform the public about lawful activity. The government may ban forms of communication more likely to deceive the public than inform it.... 447 U.S. at 563.

Thus, the Supreme Court has concluded that misleading commercial speech is not entitled to First Amendment protection. In this case the proposed remedies solely seek to remedy the potential deception in cigarette advertising. None of the proposed remedies in any way restricts the right of the cigarette industry to exercise its First Amendment right to disseminate truthful information about cigarettes.

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84 (Footnote Continued)

action, as "the Commission is not regulating truthful speech protected by the First Amendment, but is merely requiring certain statements which, if not present in current advertisements, would render those advertisements themselves part of a continuing deception of the public." 562 F.2d at 769.

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Source: https://www.industrydocuments.ucsf.edu/docs/ggmk0000

IV. CONCLUSION

Based upon its review of these remedial options, the staff has tentatively concluded that there are remedial options available that appear to be capable of providing consumers with the material health information necessary to remedy the possible deception in cigarette advertising. Of the options explored, staff believes the following are likely to be most effective: (a) additional funding for expanded educational efforts, such as public service announcements; (b) changing the shape and increasing the size of the current warning; and (c) replacing the current warning with a system of short, specific rotational warnings.[85]

Expanded educational efforts, such as public service announcements broadcast during prime viewing hours, would reach millions of consumers. Changing the size and shape of the warning would improve its noticeability, but would not provide consumers with the additional necessary health information. Replacing the current warning with a more specific single new warning would be an improvement, but having more than a single warning would allow greater information to be available to the public. Rotating the

1005052439

[85] The staff also repeats the recommendation made in past annual reports to Congress that Congress require the levels of "tar" and nicotine to be placed on cigarette packages, as well as in cigarette advertising.

Source: https://www.industrydocuments.ucsf.edu/docs/ggmk0000

various health warnings would also assist in maintaining their noticeability over an extended period, and would more effectively communicate a substantial amount of specific health information about which millions of consumers are uninformed. To be most effective these changes should involve the warnings both on cigarette packages and in cigarette advertisements. While the adoption of any one of these remedial options by itself will not eliminate the problems discussed in this report, the adoption of these remedial actions as part of an overall educational effort by Congress, the Commission or other relevant organizations appears to offer the most effective way of informing the public about significant health risks of smoking and eliminating any possible deception in cigarette advertising.

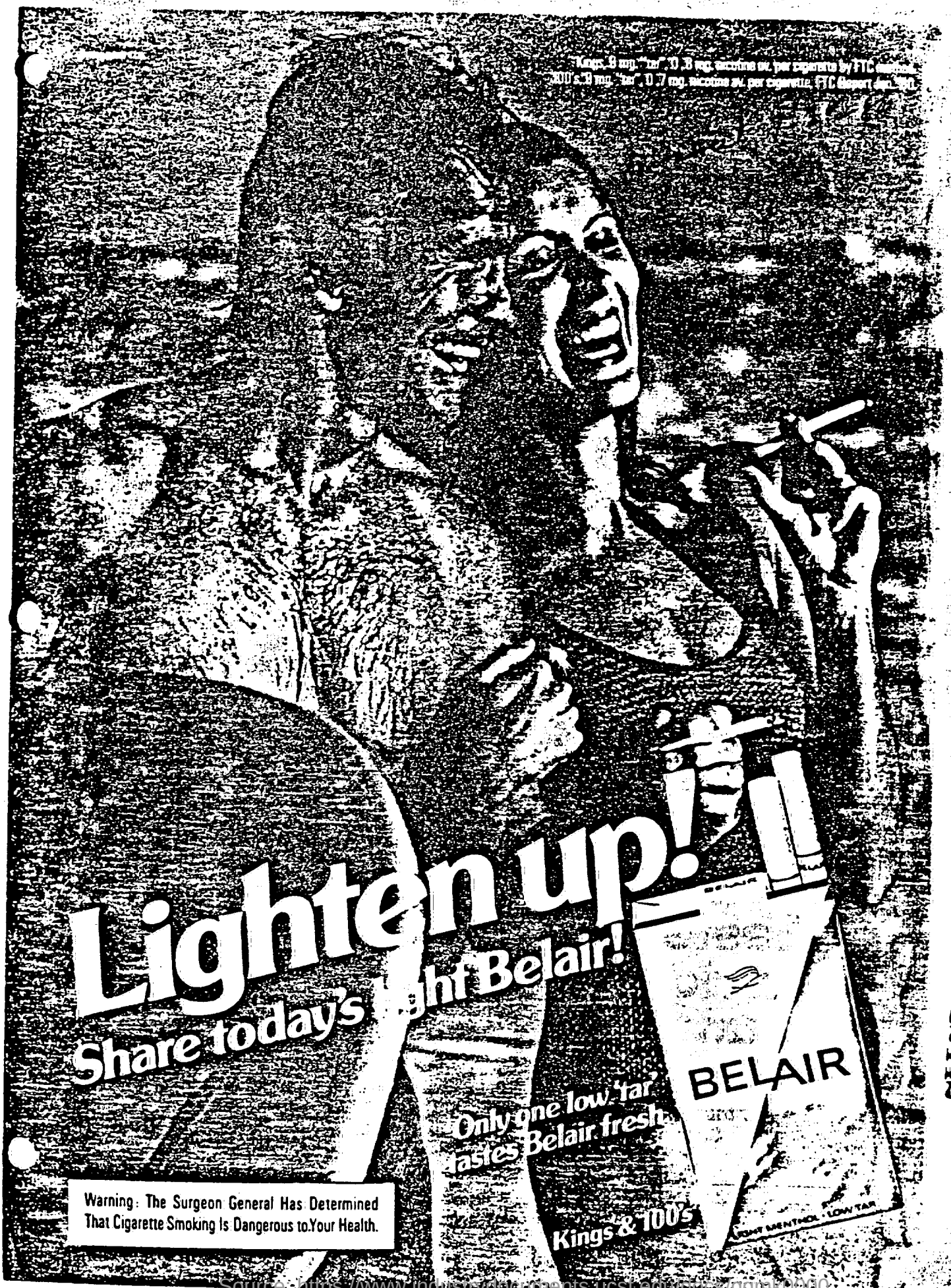
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Source: https://www.industrydocuments.ucsf.edu/docs/ggmk0000

APPENDIX A

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Source: https://www.industrydocuments.ucsf.edu/docs/gqrk0000



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Source: https://www.industrydocuments.ucsf.edu/docs/gpjk0000

Belair fresh!



Taste why Belair is America's *1 menthol under 10 mg. 'tar.'

Lower 'tar' and lighter menthol give Belair its unique fresh taste. That's why more people smoke Belair than any other menthol under 10 mg. 'tar.' So come on fresh...taste today's Belair!



Kings & 100's–9 mg.

People, 2-11-80

9 mg. "tar", 0.8 mg. nicotine av. per cigarette by FTC method.

Warning: The Surgeon General Has Determined That Cigarette Smoking Is Dangerous to Your Health.

Source: https://www.industrydocuments.ucsf.edu/docs/ggmk0000

1005052443

Benson & Hedges Lights

Only 1 mg tar

"B&H, I like your style."



Warning: The Surgeon General Has Determined That Cigarette Smoking Is Dangerous to Your Health.

Reg.: 1 mg "tar," 0.8 mg nicotine—
Men.: 1 mg "tar," 0.7 mg nicotine av.
per cigarette, FTC Report Dec. '79.

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Source: https://www.industrydocuments.ucsf.edu/docs/ggmk0000

Source: https://www.industrydocuments.ucsf.edu/docs/ggmk0000

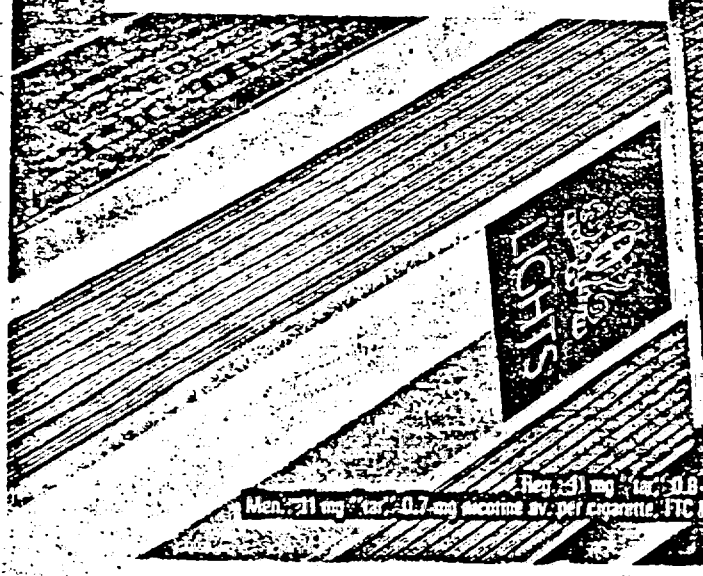
Source: https://www.industrydocuments.ucsf.edu/docs/ggmk0000

Benson & Hedges Lights

Only 11 mg tar

"B&H, I like your style."





Warning: The Surgeon General Has Determined That Cigarette Smoking Is Dangerous to Your Health.

Men: 11 mg tar, 0.7 mg nicotine av. per cigarette. FTC Report Dec. '78.

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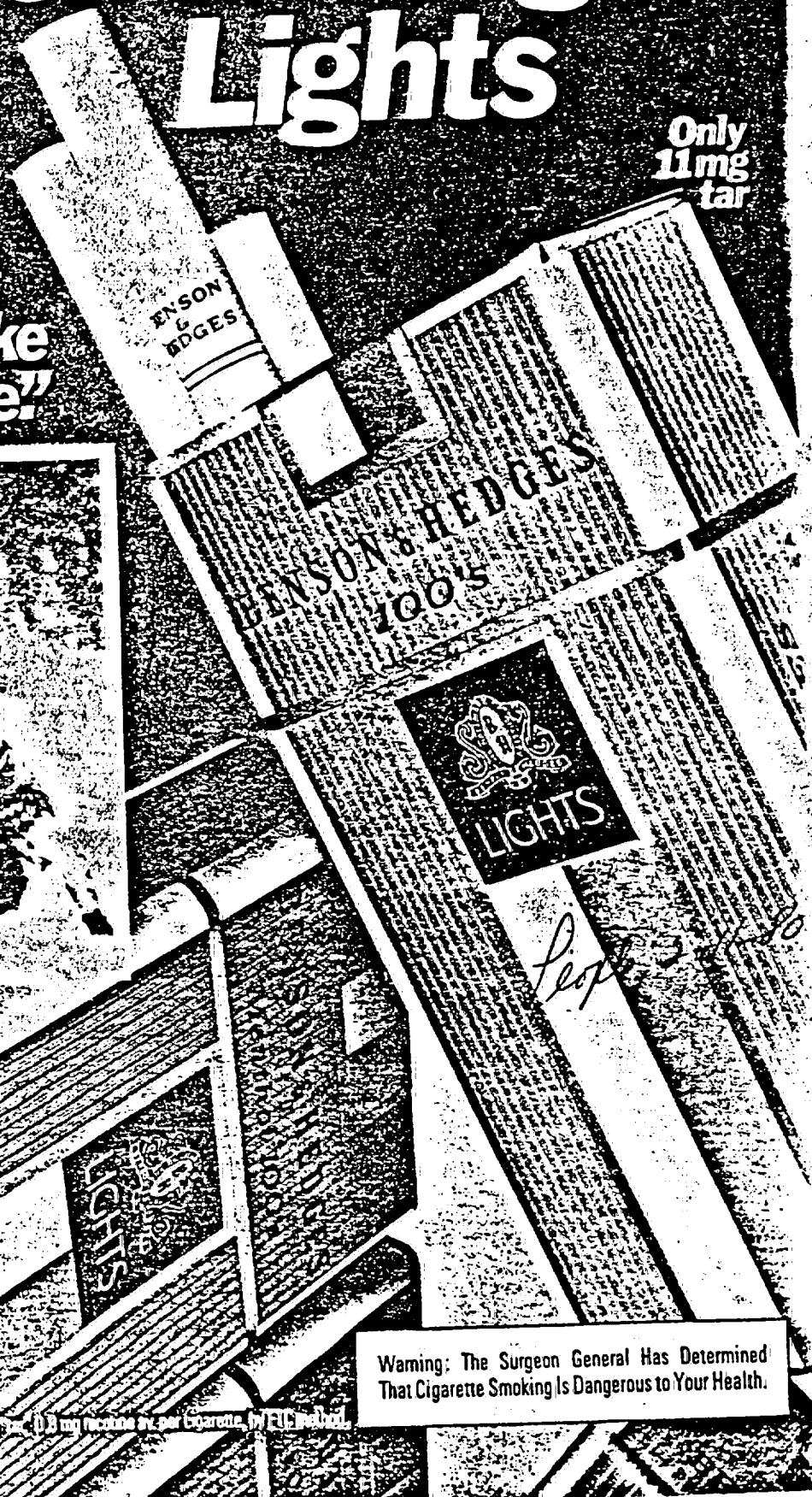
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Benson & Hedges Lights

Only 11 mg tar

"B&H, I like your style."



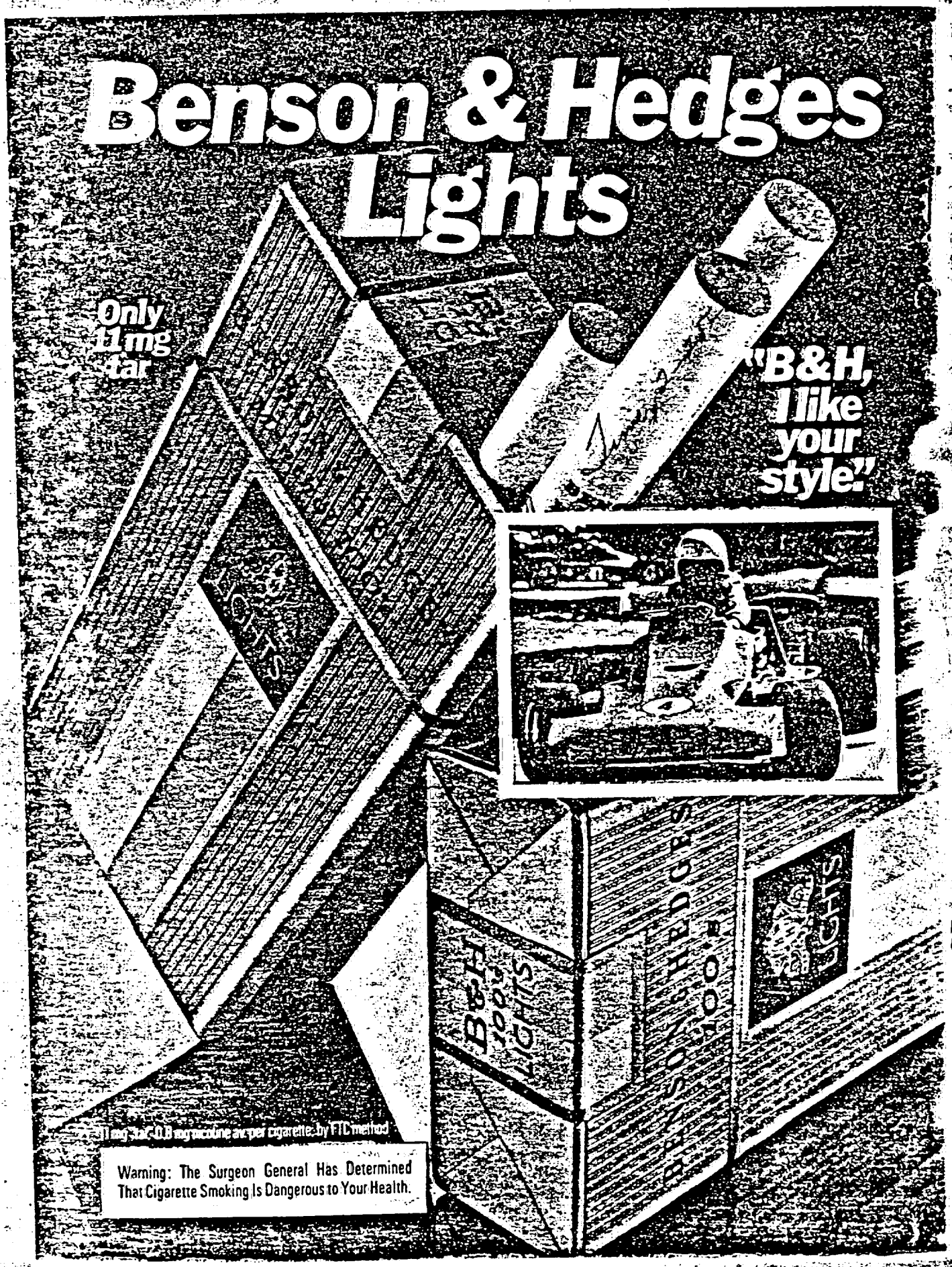


Warning: The Surgeon General Has Determined That Cigarette Smoking Is Dangerous to Your Health.

11 mg "tar", 0.8 mg nicotine av. per cigarette, by FTC method.

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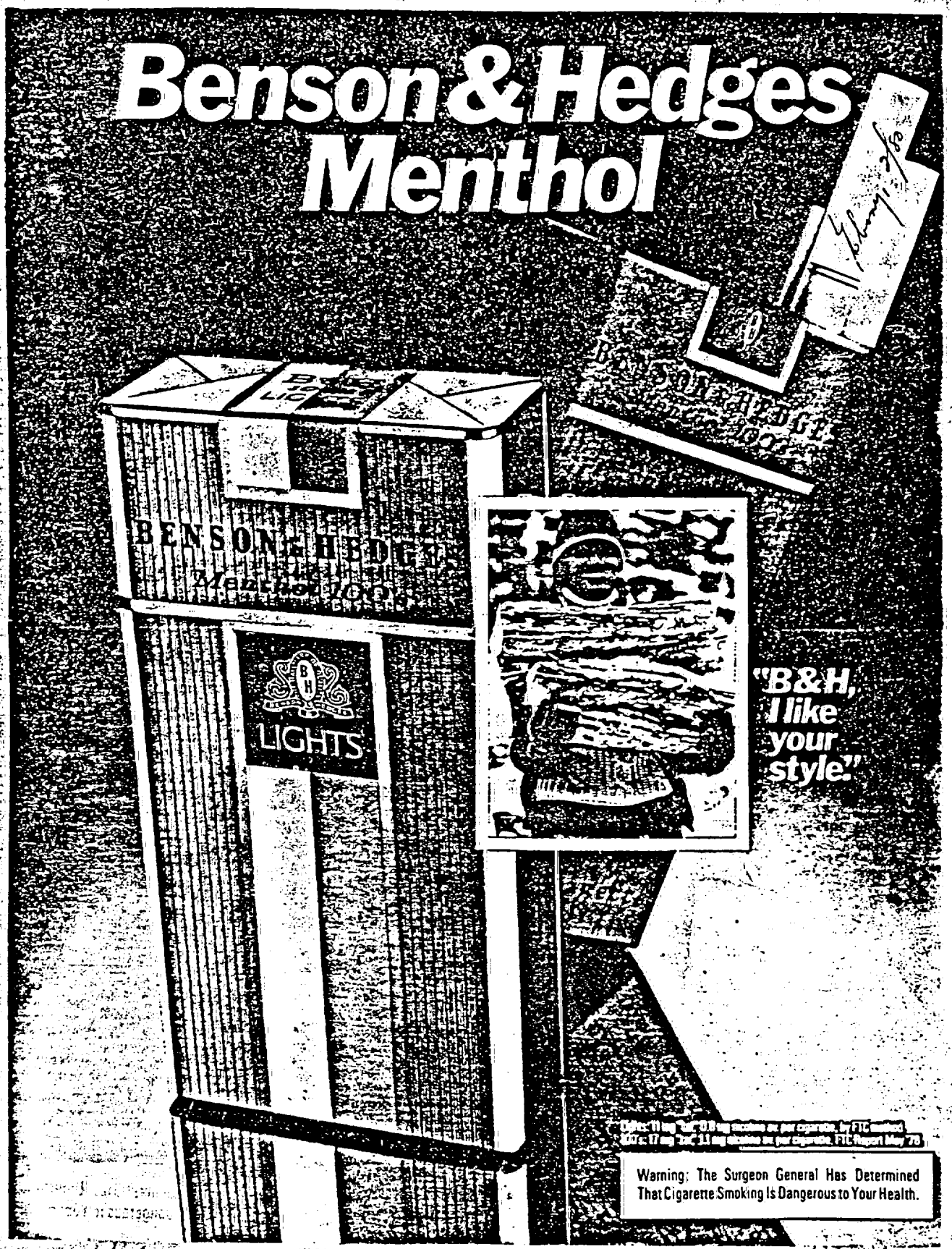
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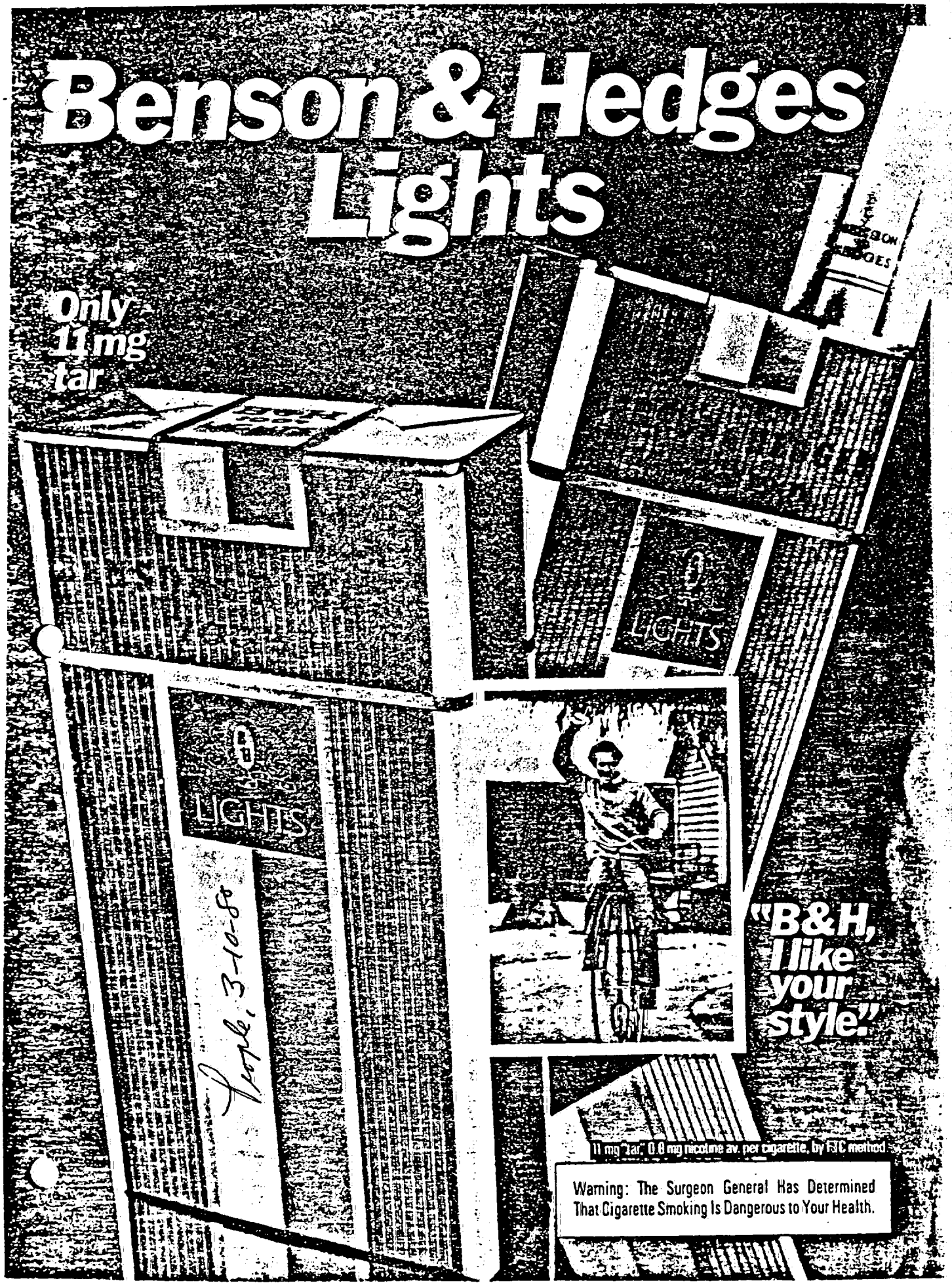
Benson & Hedges Menthol



Warning: The Surgeon General Has Determined That Cigarette Smoking Is Dangerous to Your Health.

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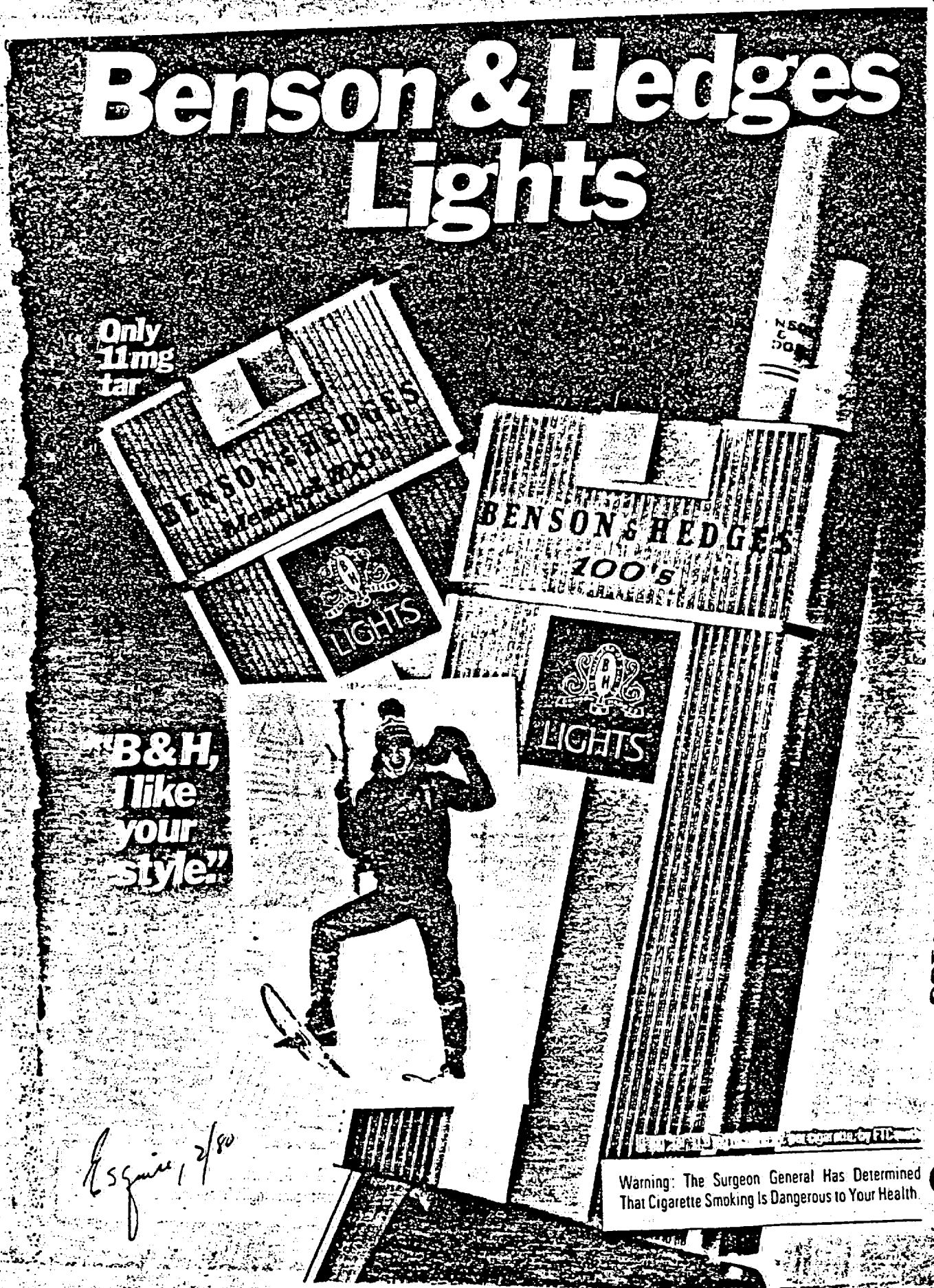
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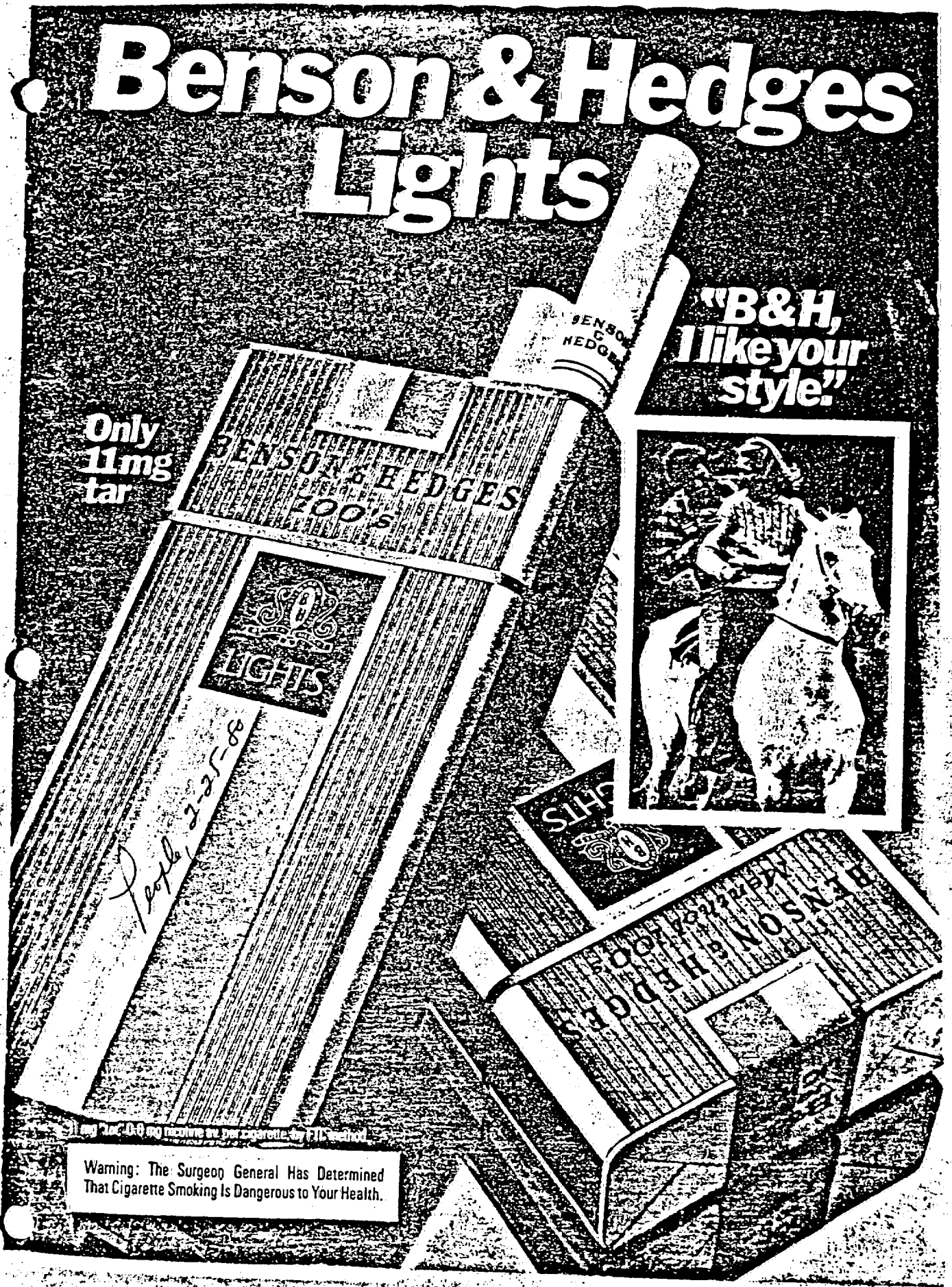
Benson & Hedges Lights



Esquire, 2/80

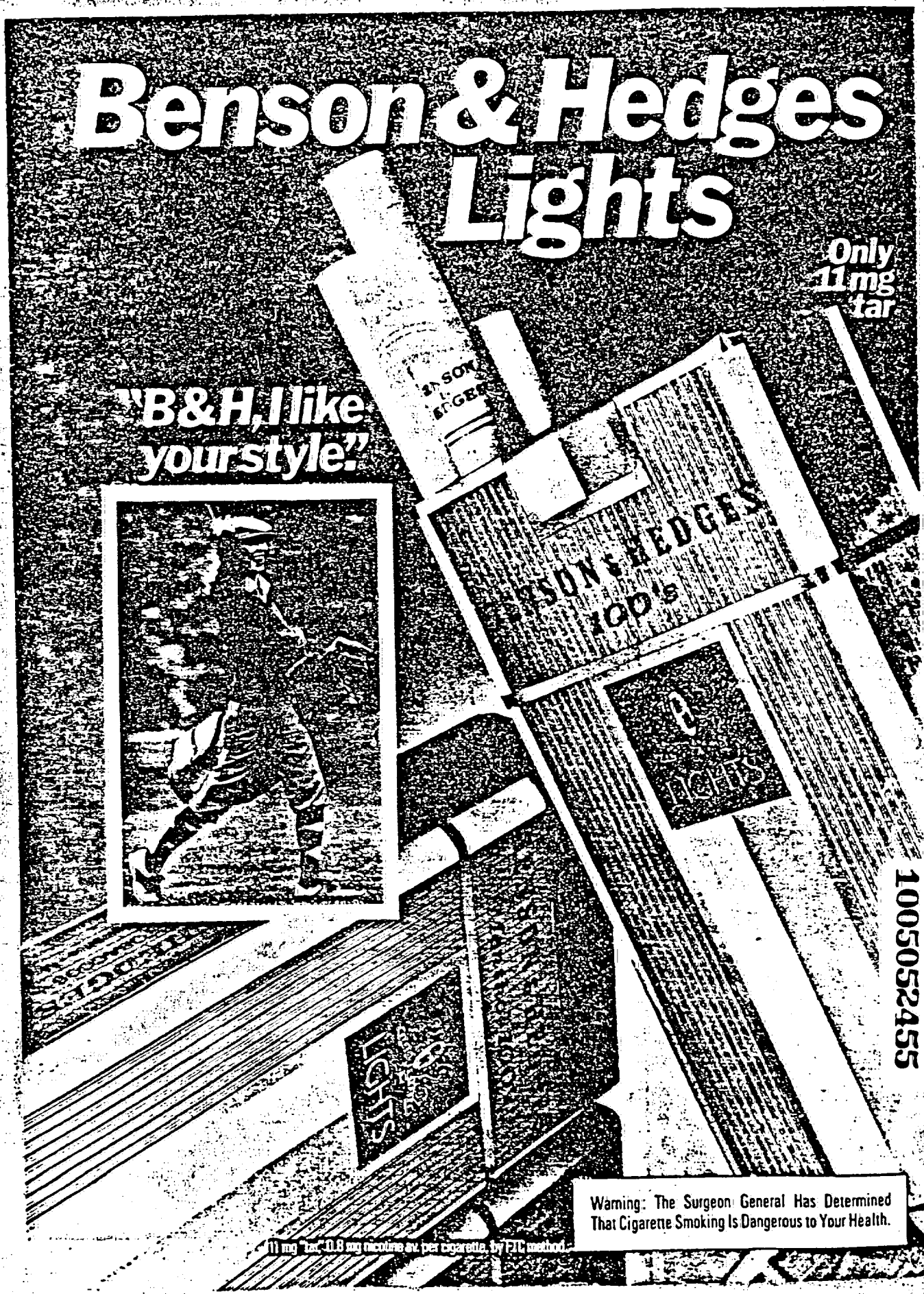
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Source: https://www.industrydocuments.ucsf.edu/docs/ggmk0000

Sports Illustrated
2/23/76



One of a kind.

He does more than inhabit. He lives. Because he knows.

He smokes for pleasure.

He gets it from the blend of Turkish and Domestic tobaccos in Camel Filters.

Do you?



Turkish and Domestic Blend

Warning: The Surgeon General Has Determined That Cigarette Smoking Is Dangerous to Your Health.

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Source: https://www.industrydocuments.ucsf.edu/docs/gqmh0000



Rensmith, 5/76

©1976 R. J. REYNOLDS TOBACCO CO.

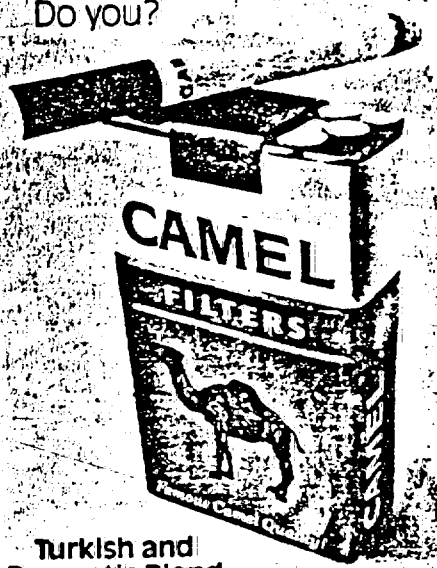
One of a kind.

He is at home in a world few men ever see.

A world where wisdom earns more respect than physical strength.

He smokes for pleasure. He gets it from the blend of Turkish and Domestic tobaccos in Camel Filters.

Do you?



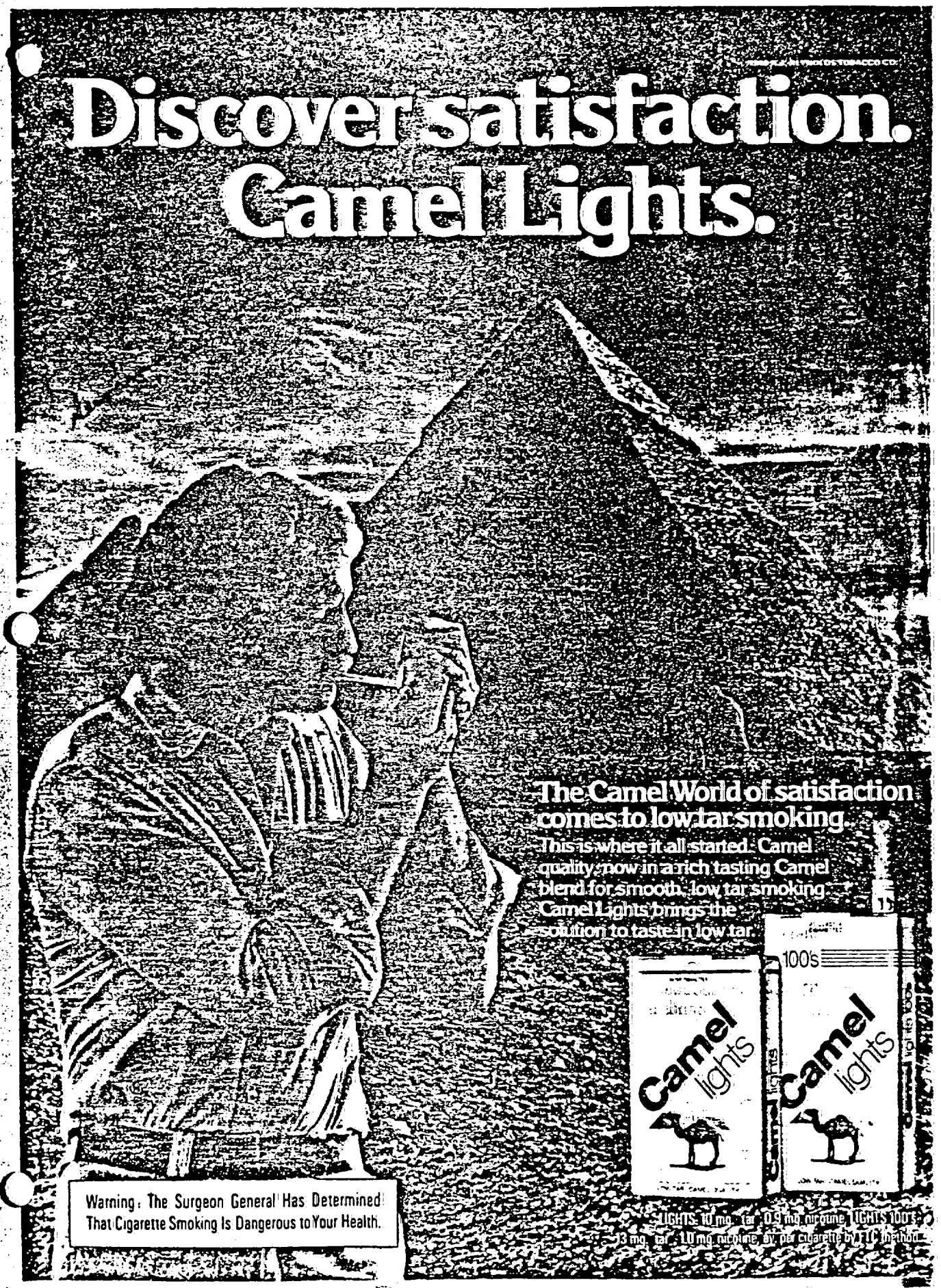
Turkish and Domestic Blend

19 mg. "tar", 1.3 mg. nicotine av. per cigarette, FTC Report SEPT. '75.

Warning: The Surgeon General Has Determined That Cigarette Smoking Is Dangerous to Your Health.

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Source: https://www.industrydocuments.ucsf.edu/docs/ggmk0000



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Source: https://www.industrydocuments.ucsf.edu/docs/ggnk0000

U.S. GOVERNMENT REPORT: CARLTON LOWEST.

Carlton claim confirmed.

Many cigarettes are using national advertising to identify themselves as "low tar." Consumers, however, should find out just how low these brands are—or aren't. Based on U.S. Government Report,

Box or Menthol:

18 Carltons have less tar than one Kent.

20 Carltons have less tar than one Kool Milds.

19 Carltons have less tar than one Marlboro Lights.

13 Carltons have less tar than one Merit.

17 Carltons have less tar than one Vantage.

22 Carltons have less tar than one Winston Lights.

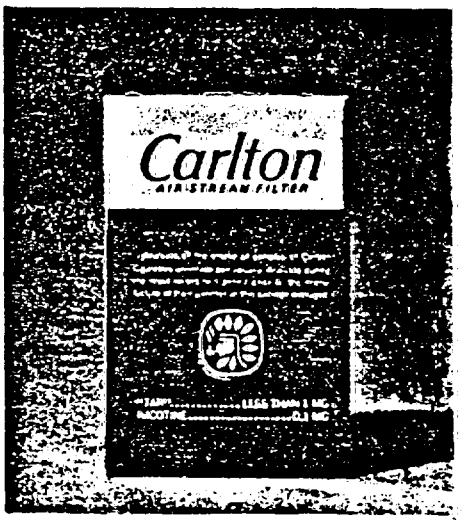
The tar and nicotine content per cigarette of selected brands is:

	tar mg./cig.	nicotine mg./cig.
Kent	11	0.9
Kool Milds	13	0.8
Marlboro Lights	12	0.8
Merit	8	0.6
Vantage	11	0.8
Winston Lights	14	1.1

Warning: The Surgeon General Has Determined That Cigarette Smoking Is Dangerous to Your Health.

		tar mg./cig.	nicotine mg./cig.
Carlton Soft Pack		1	0.1
Carlton Menthol	less than	1	0.1
Carlton Box	less than	0.5	0.05

This same report confirms of all brands, Carlton Box to be lowest with less than 0.5 mg. tar and 0.05 mg. nicotine.



LOWEST...Less than 1 mg. tar, 0.1 mg. nicotine.

Box: Less than 0.5 mg. "tar", 0.05 mg. nicotine; Soft Pack and Menthol: 1 mg. "tar", 0.1 mg. nicotine av. per cigarette, FTC Report Dec. '79.

Newsweek, 5-5-80

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Source: https://www.industrydocuments.ucsf.edu/docs/psmx0000

Pap. Mech. 2/80

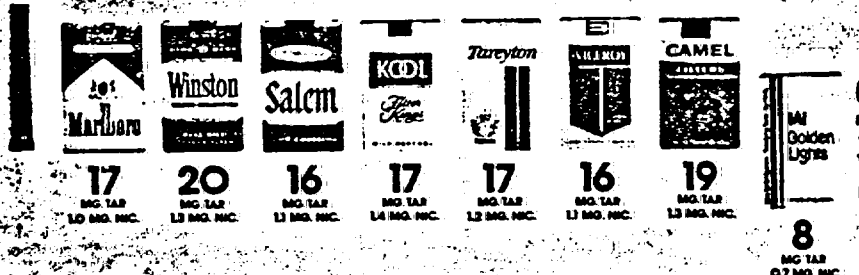
Warning: The Surgeon General Has Determined That Cigarette Smoking Is Dangerous to Your Health.

Source comparative 'tar' and nicotine figures: FTC Report May 1978. Of All Brands Sold: Lowest tar: 0.5 mg. 'tar,' 0.05 mg. nicotine av. per cigarette. Golden Lights: 8 mg. 'tar,' 0.7 mg. nicotine av. per cigarette by FTC Method.



Golden Lights™ taste astonishes first-time users.

Unbelievable taste from a low tar surprises smokers.
Many switch to Golden Lights after trying just one pack.

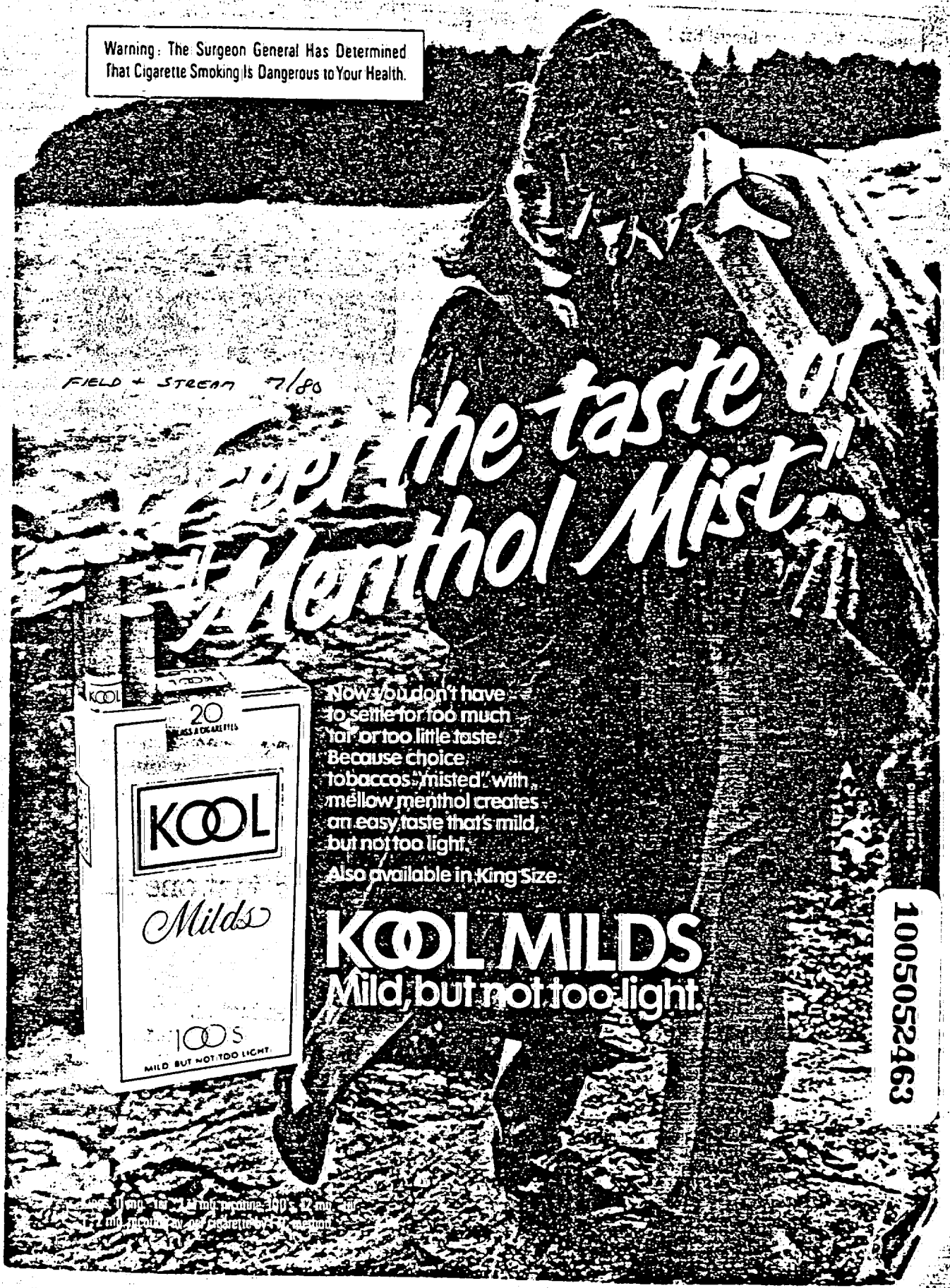


Golden Lights.
The taste high tar smokers want in a low tar.
(Regular & Menthol.)

©Lorillard, U.S.A., 1979

1005052462

Source: https://www.industrydocuments.ucsf.edu/docs/gpwk0000


Warning: The Surgeon General Has Determined That Cigarette Smoking Is Dangerous to Your Health.
FIELD + STREAM 7/80
...the taste of Menthol Mist.
Now you don't have to settle for too much tar or too little taste. Because choice tobaccos "misted" with mellow menthol creates an easy taste that's mild, but not too light.
Also available in King Size.
KOOL MILDS
Mild, but not too light.
KOOL
20
Milds
100S
MILD BUT NOT TOO LIGHT
10052463



© Lorillard, U.S.A., 1979

Journal, 2/80

MAX MAX

Wear a Max today.

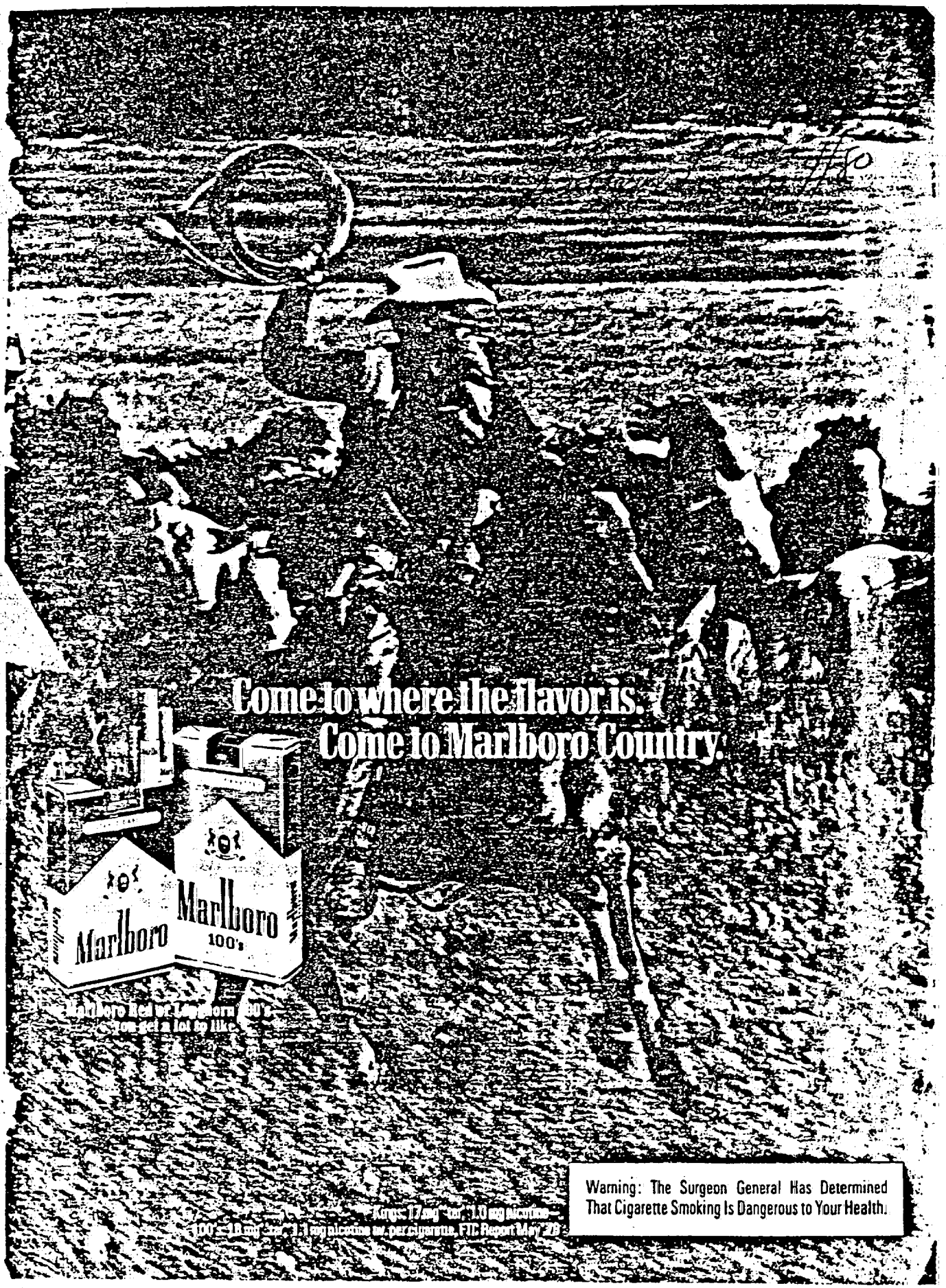
Long, lean, all-white, tasteful. Max 120s.

Warning: The Surgeon General Has Determined That Cigarette Smoking Is Dangerous to Your Health.

17 mg. "tar," 1.3 mg. nicotine av. per cigarette, FTC Report May 1978.

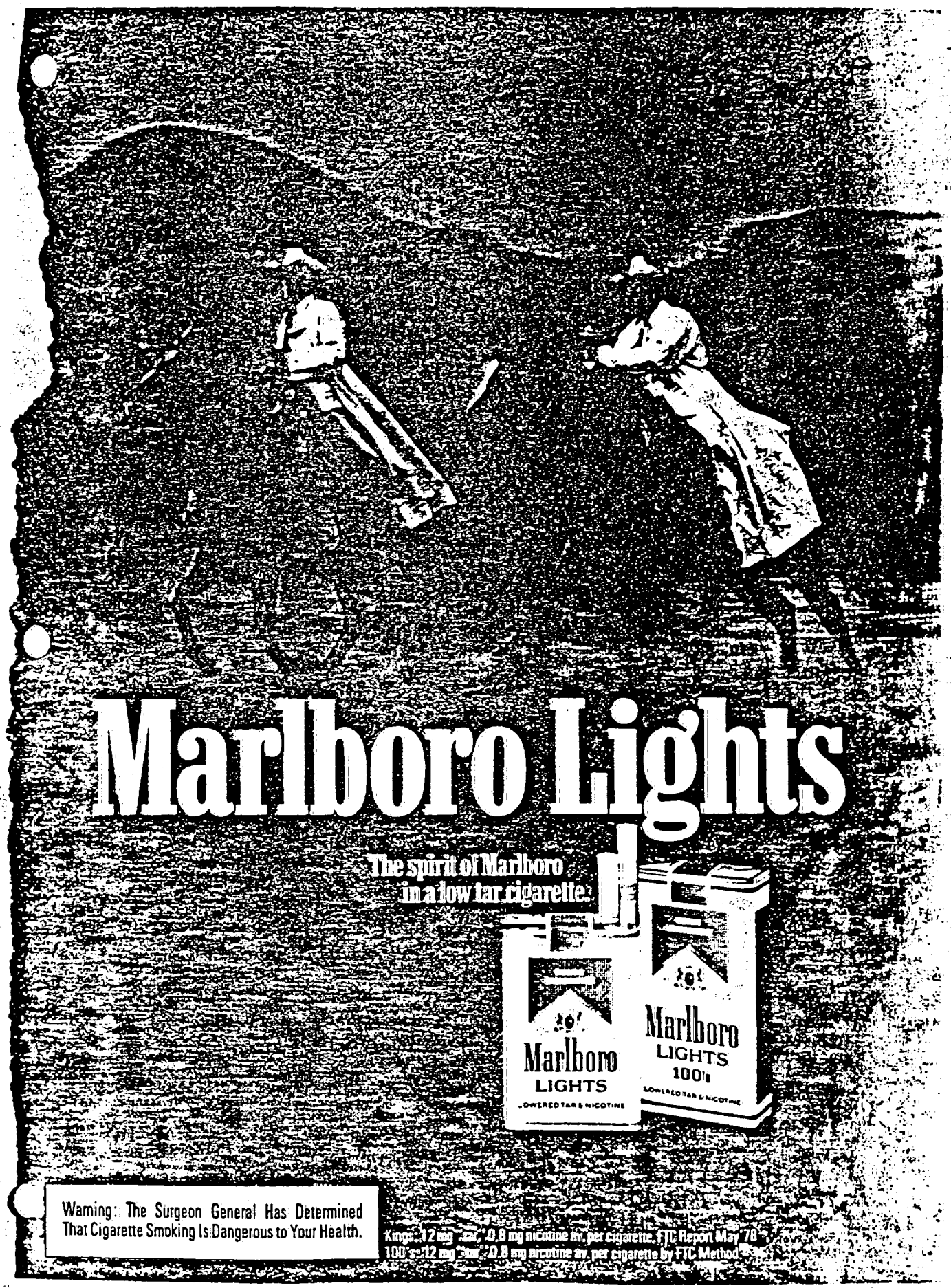
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Source: https://www.industrydocuments.ucsf.edu/docs/ggmk0000



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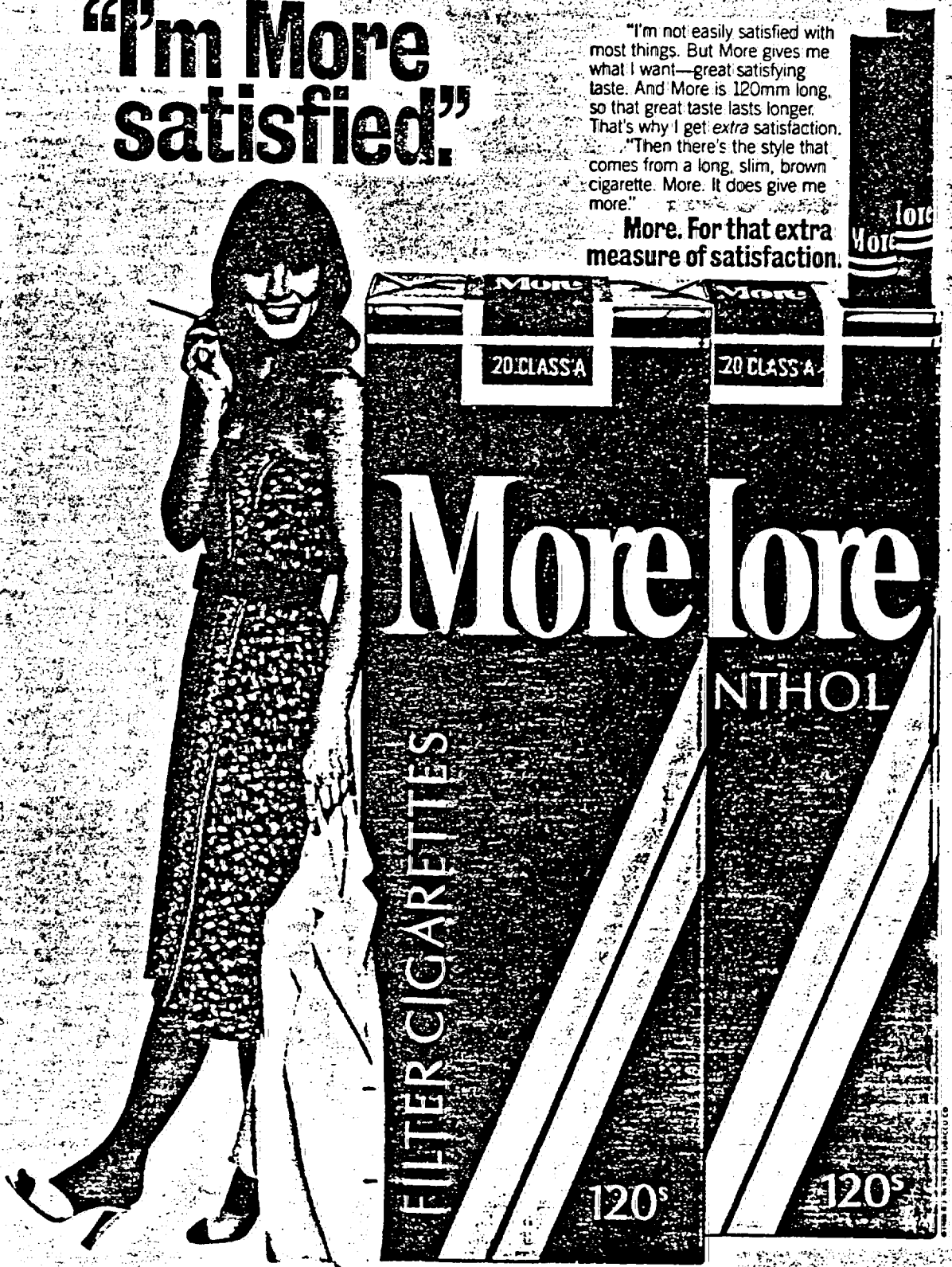
Source: https://www.industrydocuments.ucsf.edu/docs/gqmk0000

"I'm More satisfied."

"I'm not easily satisfied with most things. But More gives me what I want—great satisfying taste. And More is 120mm long, so that great taste lasts longer. That's why I get *extra* satisfaction.

"Then there's the style that comes from a long, slim, brown cigarette. More. It does give me more."

More. For that extra measure of satisfaction.



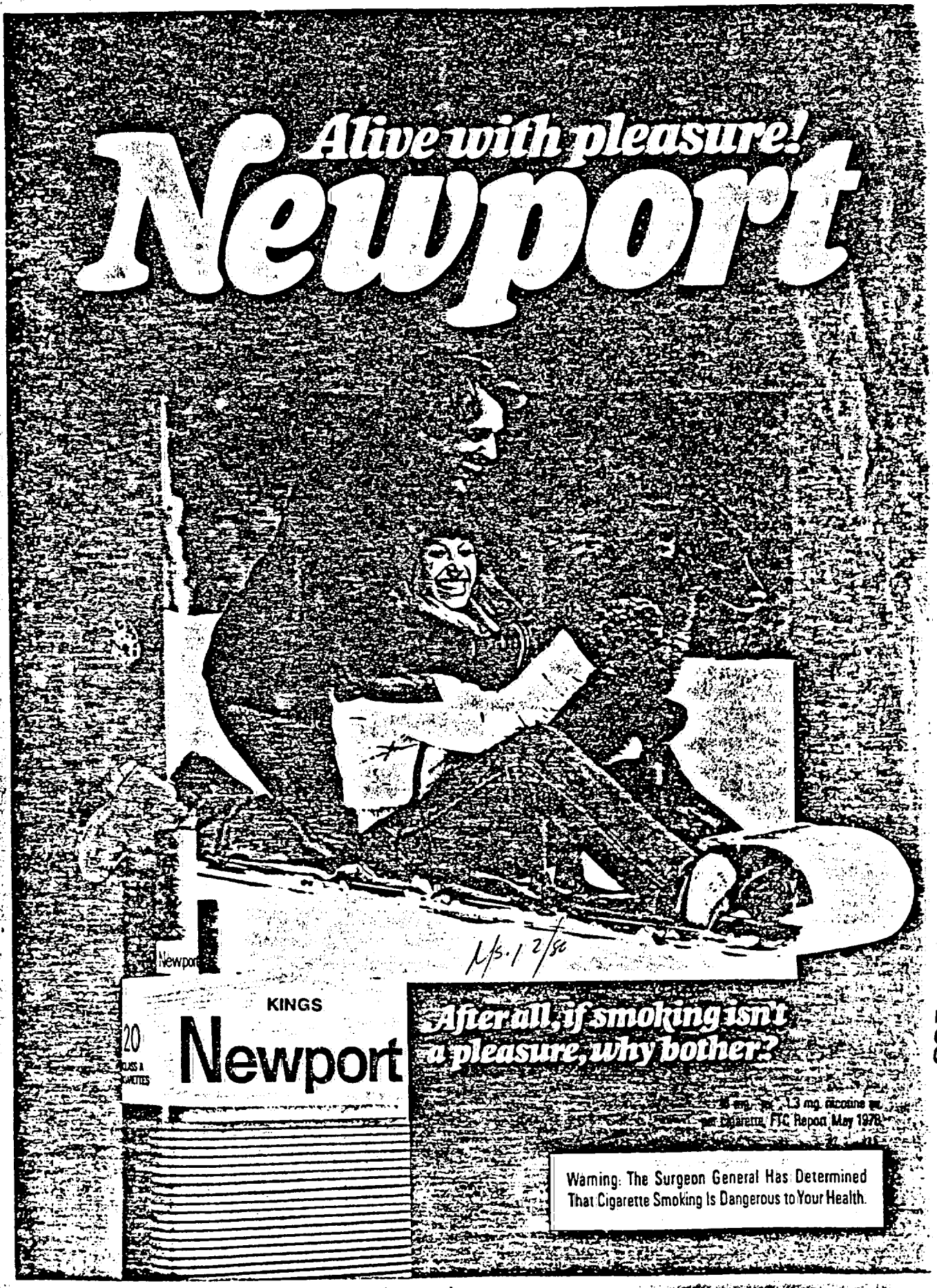
21 mg. "tar", 1.8 mg. nicotine av. per cigarette by FTC method.

Warning: The Surgeon General Has Determined That Cigarette Smoking Is Dangerous to Your Health.

1005052467

HOUSE BEAUTIFUL 6/80

Source: https://www.industrydocuments.ucsf.edu/docs/gqdc0000



1005052468

Source: https://www.industrydocuments.ucsf.edu/docs/ggnk0000



per capsule, FTC Report January 1980.

TIME 6/23/80

1005052469

Source: https://www.industrydocuments.ucsf.edu/docs/ggmk0000

Sports Illustrated, 9-24-79

Alive with pleasure!

Newport

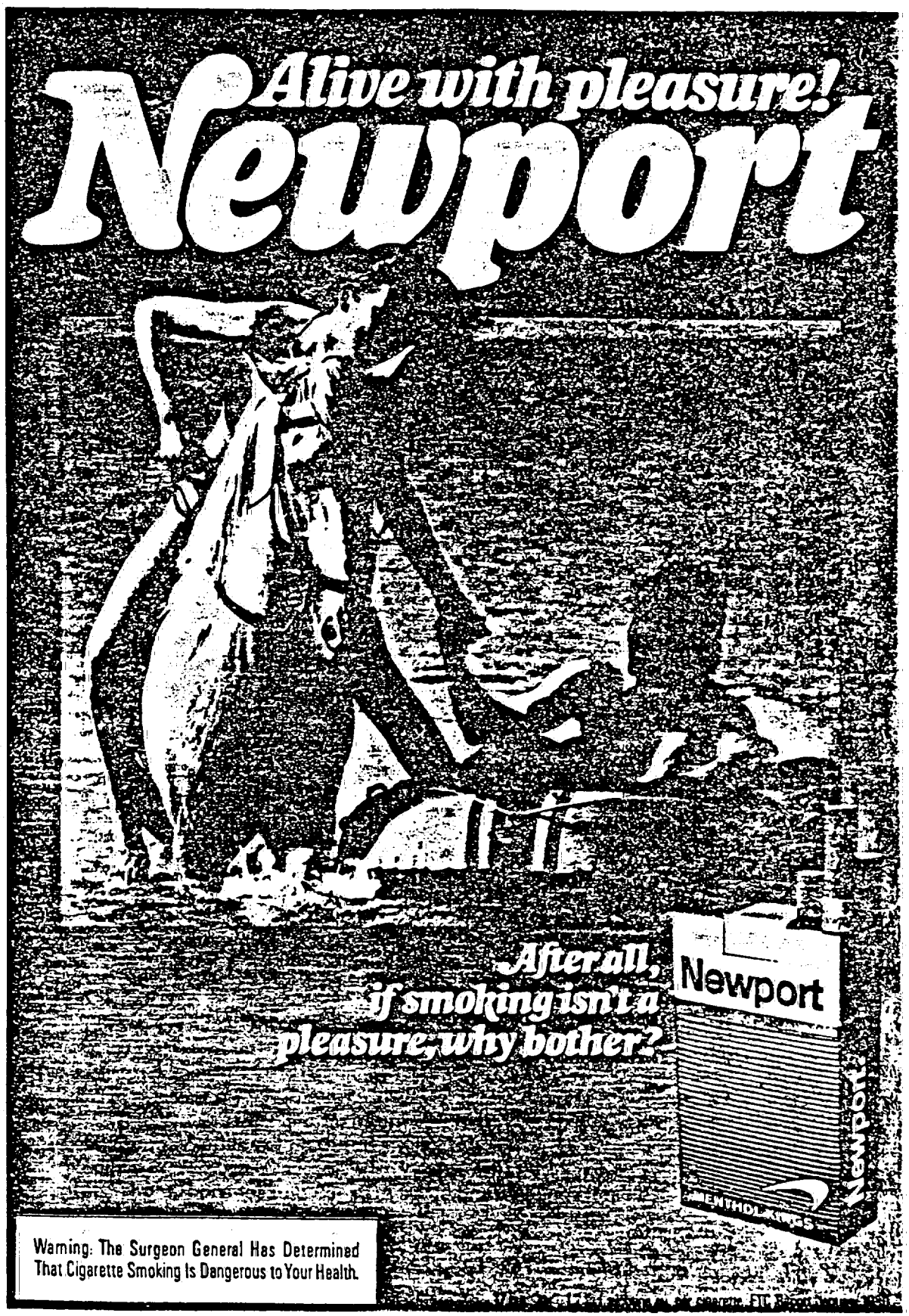


After all, if smoking isn't a pleasure, why bother?

Warning: The Surgeon General Has Determined That Cigarette Smoking Is Dangerous to Your Health.

10050524 70

Source: https://www.industrydocuments.ucsf.edu/docs/gpmk0000

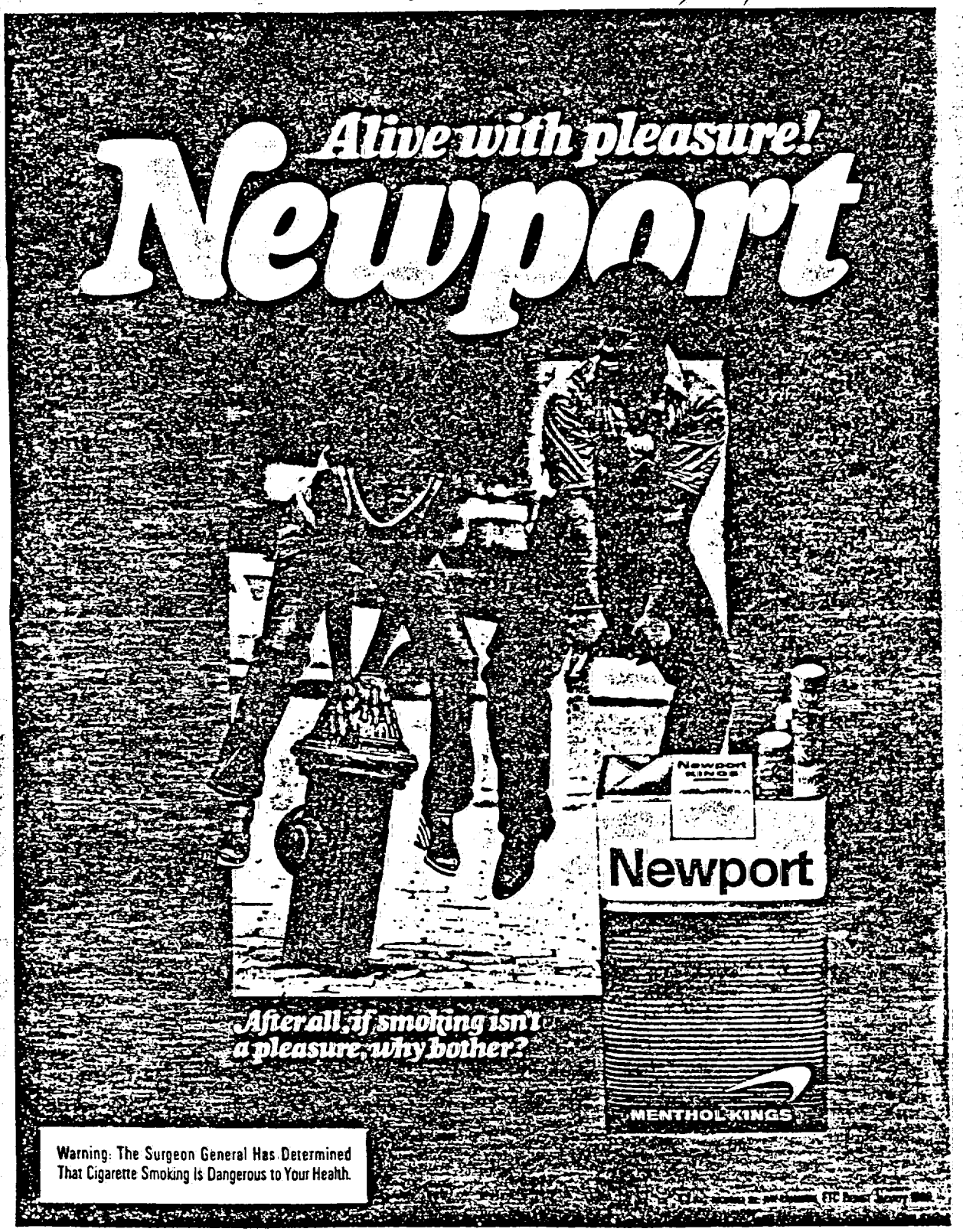


NEWSWEEK 7/14/80

10050471

Source: https://www.industrydocuments.ucsf.edu/docs/ggmk0000

Ebony, 8/80



1005052472

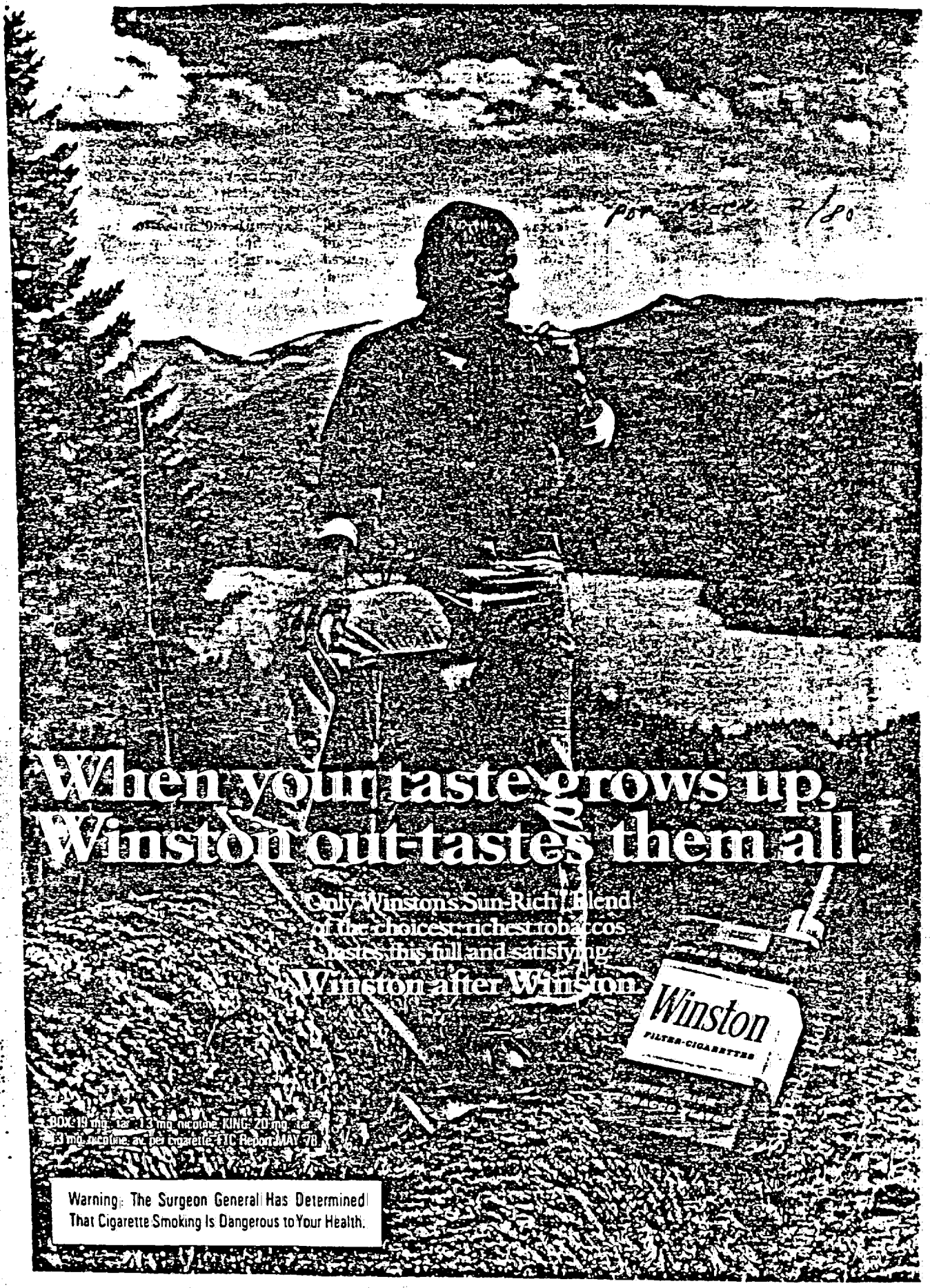
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June, 3/77



1005052423

Source: https://www.industrydocuments.ucsf.edu/docs/ggnk0000

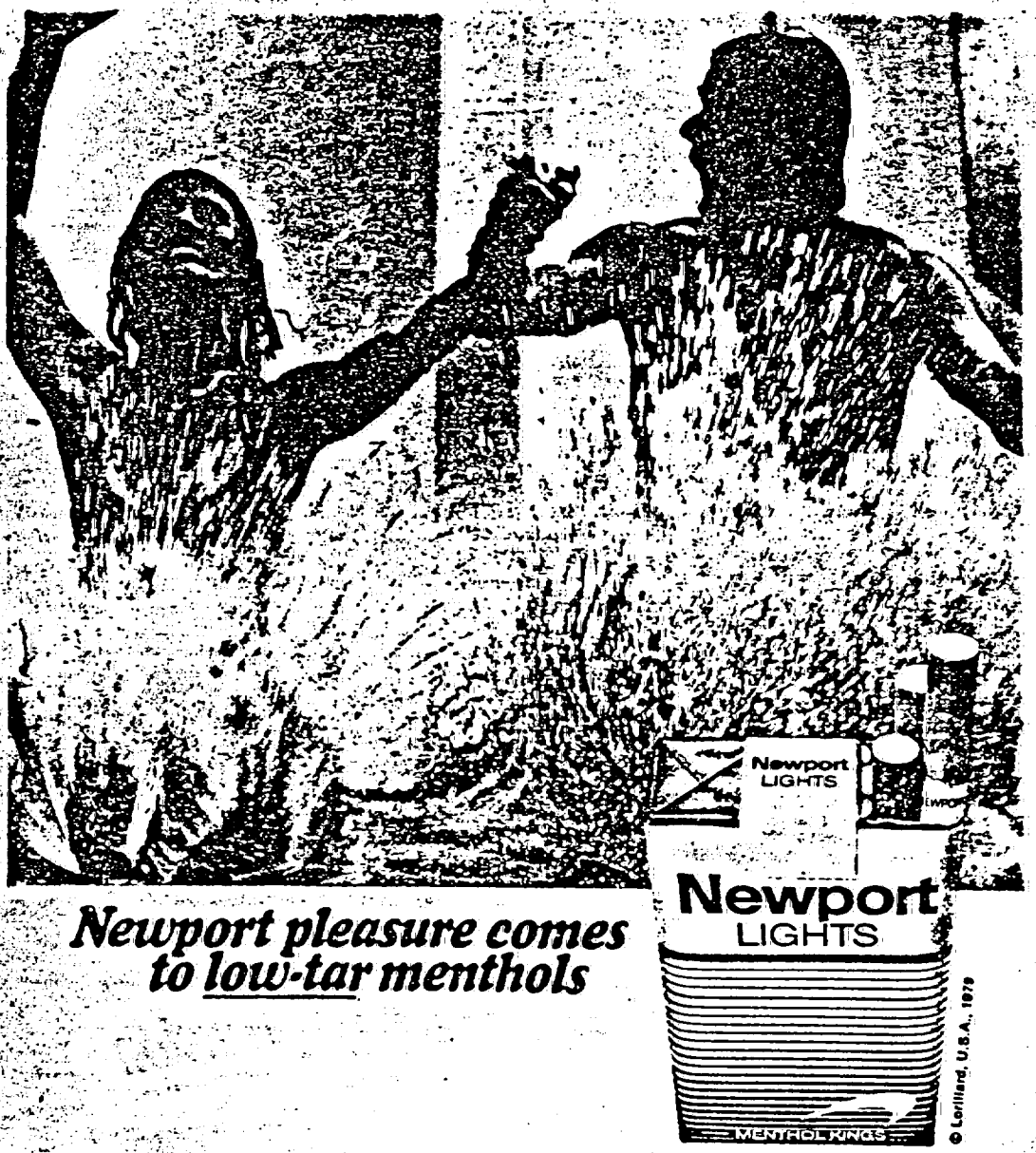


1005052474

Source: https://www.industrydocuments.ucsf.edu/docs/ggmk0000

Revive your taste!

Newport Lights



Newport pleasure comes to low-tar menthols

Warning: The Surgeon General Has Determined That Cigarette Smoking Is Dangerous to Your Health.

10 mg. "tar", 0.8 mg. nicotine av. per cigarette, FTC Report May '78.

People, 10-1-79

1005052475

Source: https://www.industrydocuments.ucsf.edu/docs/gqmk0000



Considering all I'd heard, I decided to either quit or smoke True.

I smoke True.



© Lorillard 1975

1005052476

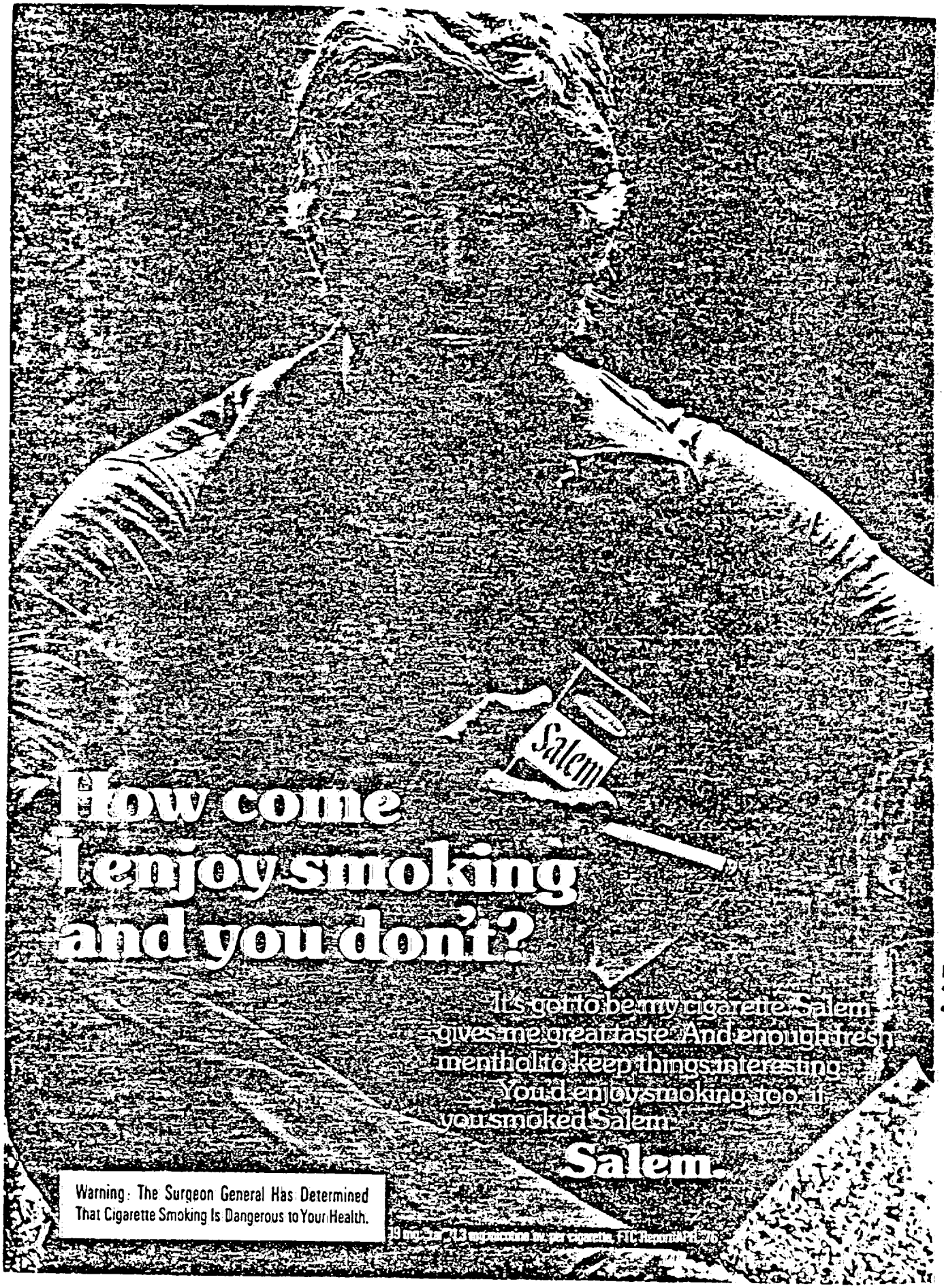
The low tar, low nicotine cigarette.
Think about it.

Warning: The Surgeon General Has Determined That Cigarette Smoking Is Dangerous to Your Health.

King Regular: 11 mg. "tar", 0.6 mg. nicotine, 100's Menthol: 13 mg. "tar", 0.8 mg. nicotine, av. per cigarette, FTC Report April '75.

Cosmopolitan
Jan 76

Source: https://www.industrydocuments.ucsf.edu/docs/gqmk0000



1005052477

Source: https://www.industrydocuments.ucsf.edu/docs/ggmk0000

People, 1-28-80

© Lorillard, U.S.A. 1979

Warning: The Surgeon General Has Determined That Cigarette Smoking Is Dangerous to Your Health.

Triumph for Tar Watchers!

Triumph shakes up the "low tars" with taste, and a lot less tar.



Don't let them fool you any more. Today's low tar with taste is not an 8 mg tar (like Merit) or an 11 (like Vantage) or a 12 (like Marlboro Lights). And it's certainly not a Carlton at 1 (which doesn't even claim to have taste).

It's a 3 mg tar Triumph. All the words in the world won't tell you how good it tastes. You'll simply have to try it. Taste it. Then ask yourself, isn't it time you came down from yesterday's "low tar" to Triumph – today's low tar.™

Triumph for taste! Only 3 mg tar.

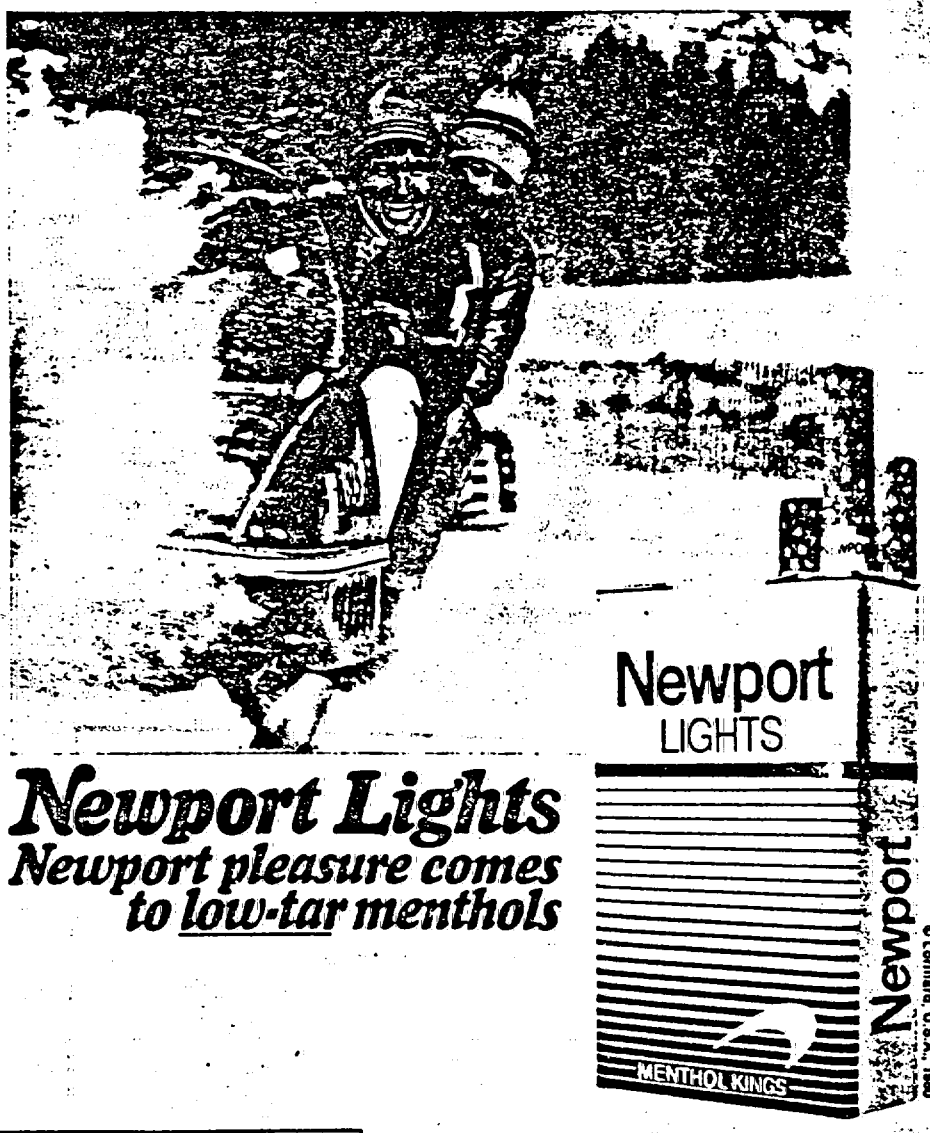
01 All Brands Sold: Lowest tar: 0.5 mg. "tar," 0.05 mg. nicotine av. per cigarette. Triumph: 3 mg. "tar," 0.4 mg. nicotine av. per cigarette by FTC Method.

1005052478

Source: https://www.industrydocuments.ucsf.edu/docs/ggmk0000

Popular Science, 3/80

Revive your taste!



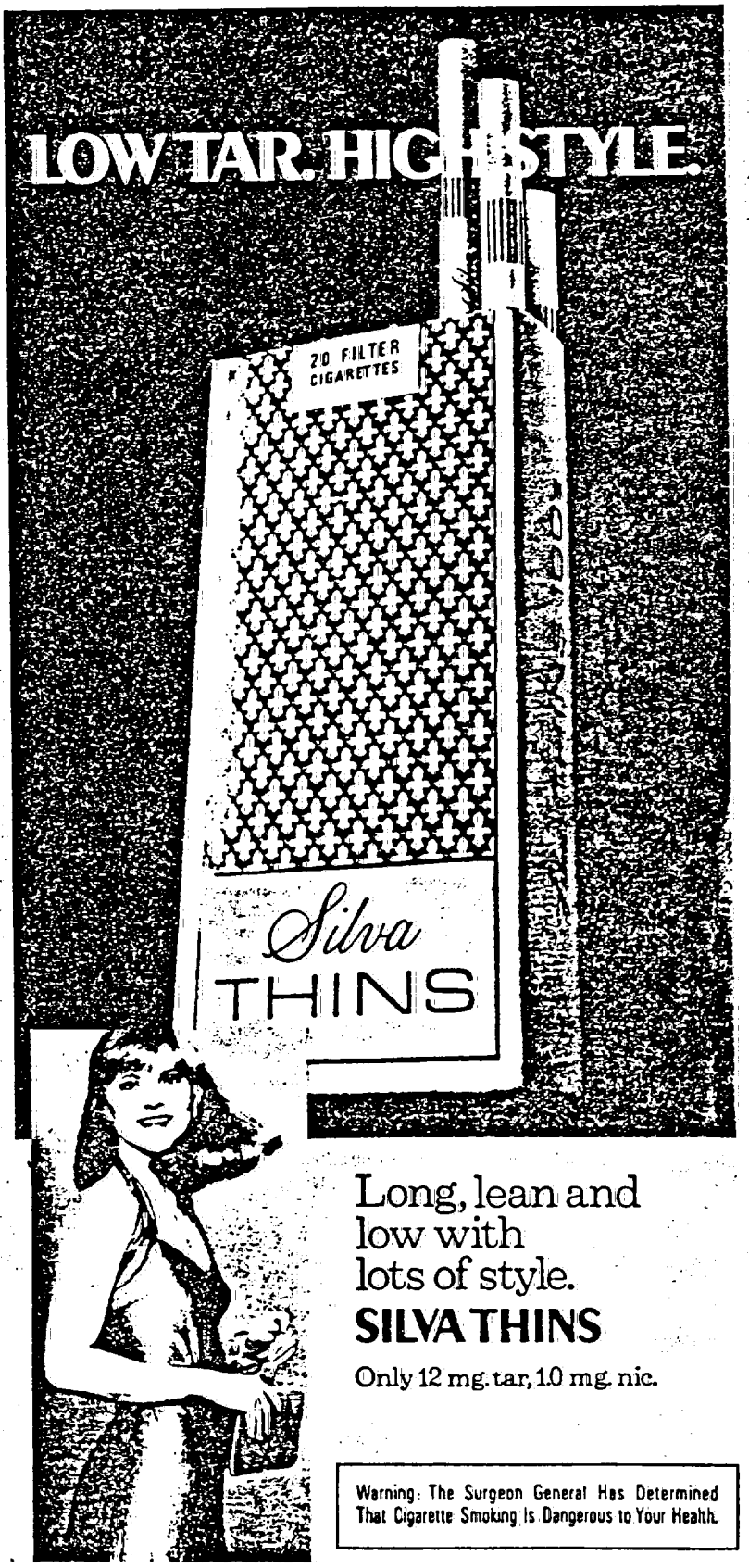
Newport Lights
Newport pleasure comes to low-tar menthols

Warning: The Surgeon General Has Determined That Cigarette Smoking Is Dangerous to Your Health.

10 mg. "tar", 0.8 mg. nicotine av. per cigarette, FTC Report May 1978.

1005052479

Source: https://www.industrydocuments.ucsf.edu/docs/ggmk0000



Regular: 12 mg. "tar", 1.0 mg. nicotine; Menthol: 10 mg. "tar", 0.8 mg. nicotine av. per cigarette, FTC Report Dec. '79.

COSMOPOLITAN 6/80

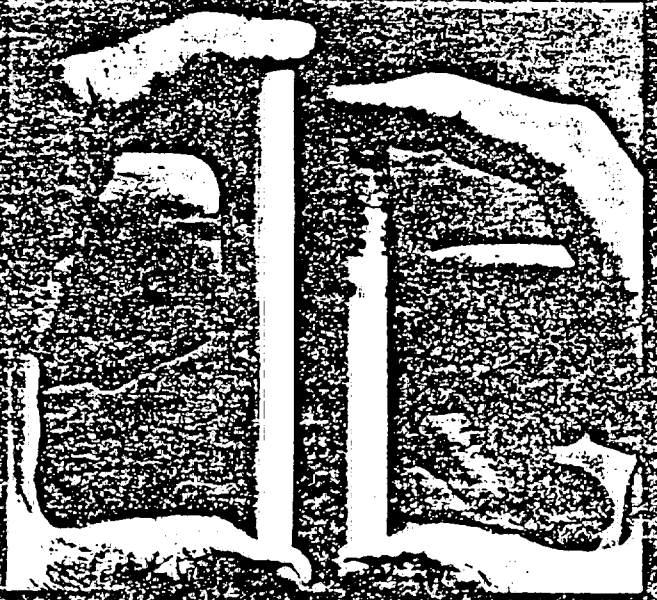
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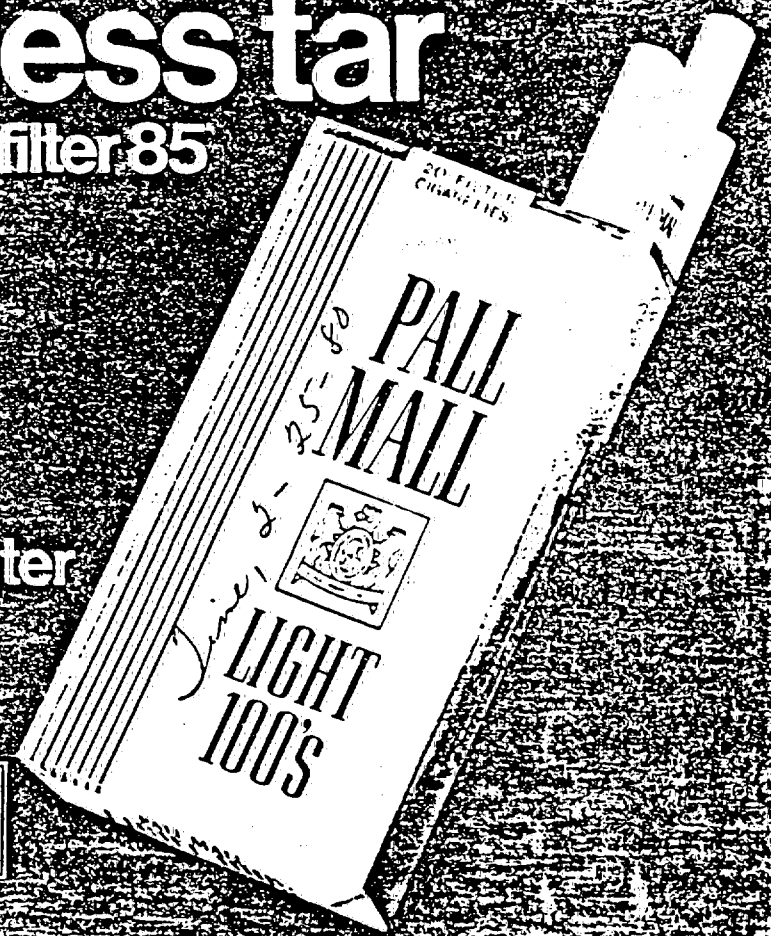
PALL MALL LIGHT 100's

Longer, yet lighter

Pall Mall Light 100s	12 mg tar 1.0 mg nicotine
Winston 85	20 mg tar 1.3 mg nicotine
Lowest brand	0.5 mg tar 0.05 mg nicotine



A third less tar than the leading filter 85



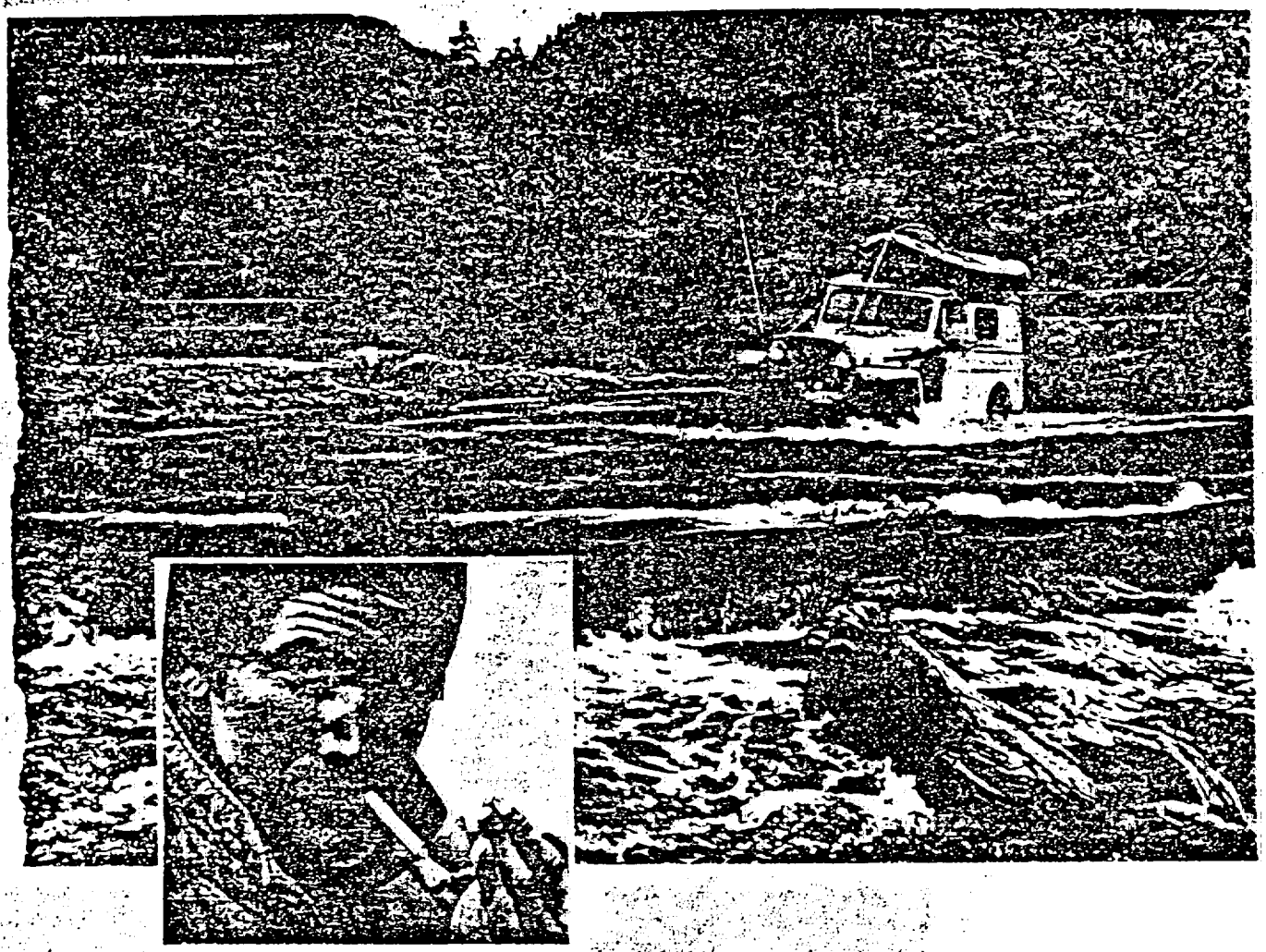
Longer, yet lighter

Warning: The Surgeon General Has Determined That Cigarette Smoking Is Dangerous to Your Health.

12 mg "tar", 1.1 mg. nicotine av. per cigarette by FTC method

1005052481

Source: https://www.industrydocuments.ucsf.edu/docs/ggmk0000



"Low tar Real tastes strong enough to satisfy... cool enough to refresh."



The strong tasting low tar menthol.

Only 8mg tar.

Warning: The Surgeon General Has Determined That Cigarette Smoking Is Dangerous to Your Health.

MENTHOL: 8 mg. "tar", 0.6 mg. nicotine av. per cigarette. FTC Report MAY '78.

Road & Track, 10/78

1005052482

Source: https://www.industrydocuments.ucsf.edu/docs/ggmk0000

TASTE THE GOOD TIMES.
RALEIGHTS



Lights: 9 mg. "tar", 0.8 mg. nicotine; Lights 100's, 9 mg. "tar", 0.9 mg. nicotine av. per cigarette by FTC method.

Warning: The Surgeon General Has Determined That Cigarette Smoking Is Dangerous to Your Health.

Extra Burley tobacco fortifies the flavor.

Finally! Genuine tobacco flavor in a low 'tar' cigarette...plus Double Gift Coupons.

For free Gift Catalog. Call toll-free: (1-800) 626-5510. (Ky. residents call toll-free: (1-800) 752-6010.)

Outdoor Life 8/79

1005052483

Source: https://www.industrydocuments.ucsf.edu/docs/ggmk0000

TASTE THE GOOD TIMES.

RALEIGHTS



Lights, 9 mg. "tar", 0 .8 mg. nicotine; Lights 100's, 9 mg. "tar", 0 .9 mg. nicotine av. per cigarette by FTC method.

Warning: The Surgeon General Has Determined That Cigarette Smoking Is Dangerous to Your Health.

Extra Burley tobacco fortifies the flavor.

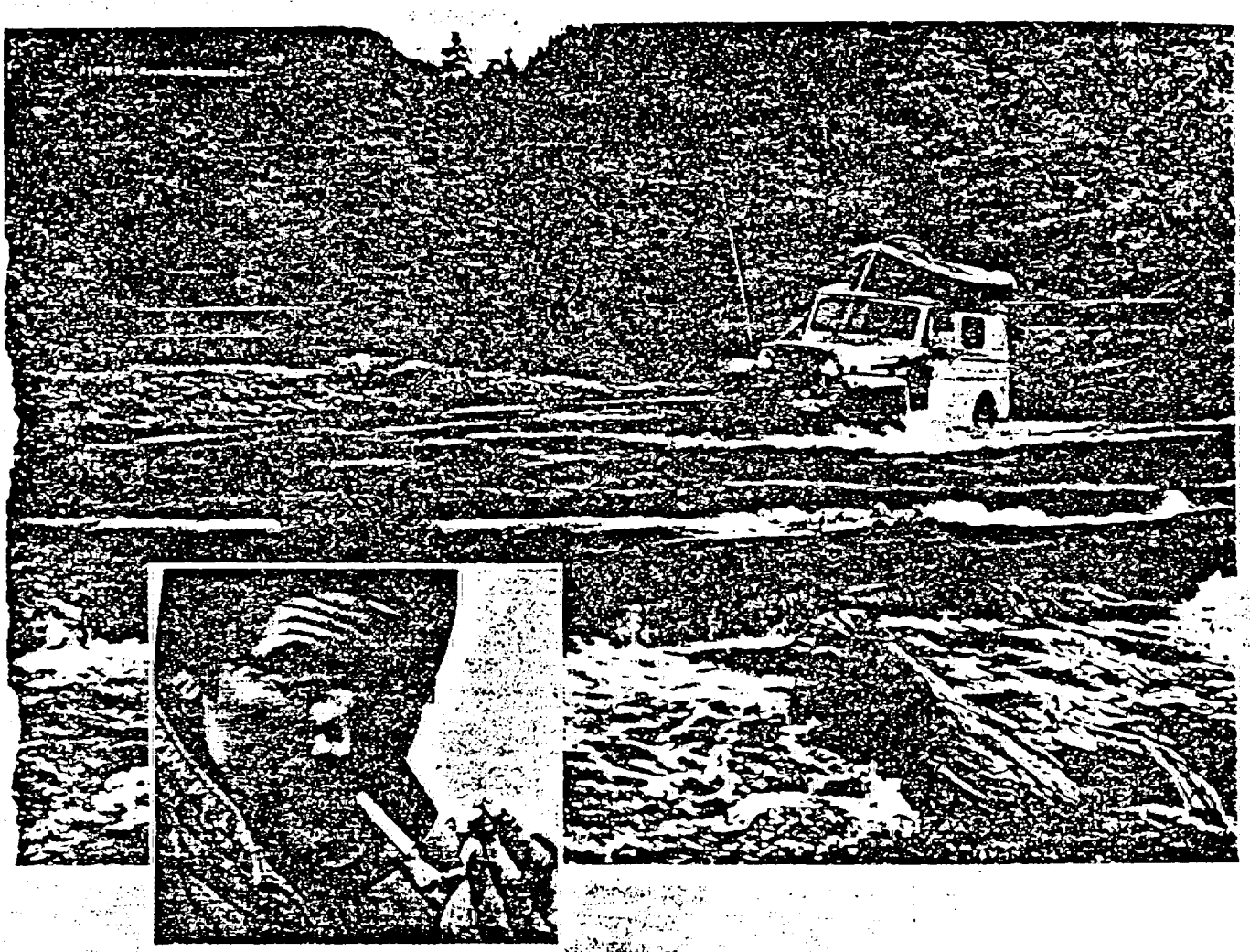
Finally! Genuine tobacco flavor in a low 'tar' cigarette...plus Double Gift Coupons.

For free Gift Catalog. Call toll-free: (1-800) 626-5510. (Ky. residents call toll-free: (1-800) 752-6010.)

Outdoor Life 9/79

100505484

Source: https://www.industrydocuments.ucsf.edu/docs/ggmk0000



"Low tar Real tastes strong enough to satisfy... cool enough to refresh."



The strong tasting low tar menthol.

Only 8mg tar.

Warning: The Surgeon General Has Determined That Cigarette Smoking Is Dangerous to Your Health.

MENTHOL: 8 mg. "tar", 0.6 mg. nicotine av. per cigarette, FTC Report MAY '78.

Road & Track, 10/78

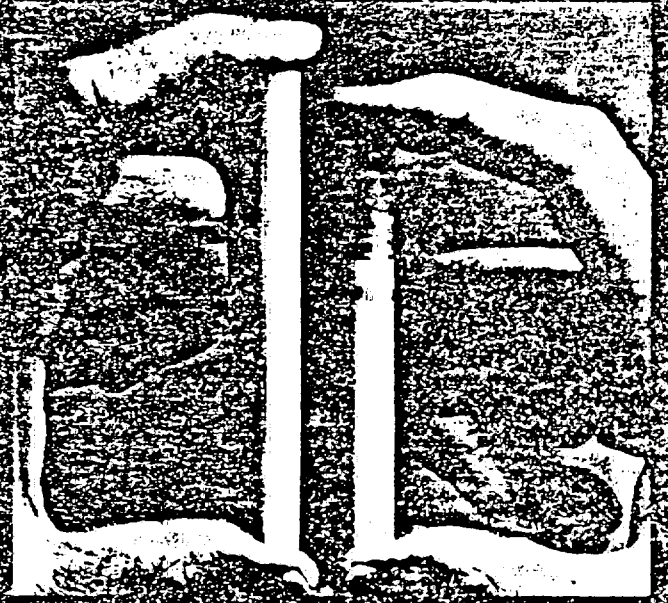
10050524S5

Source: https://www.industrydocuments.ucsf.edu/docs/ggmk0000

PALL MALL LIGHT 100's

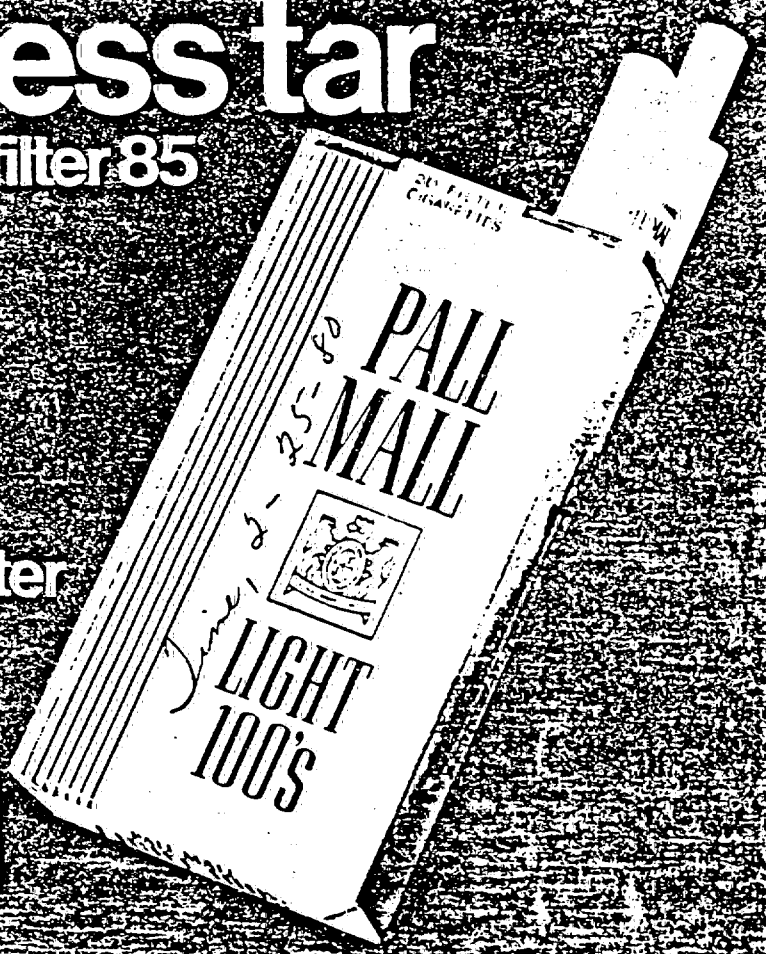
Longer, yet lighter.

Pall Mall Light 100s	12 mg tar 1.0 mg nicotine
Winston 85	20 mg tar 1.3 mg nicotine
Lowest brand	0.5 mg tar 0.05 mg nicotine



A third less tar

than the leading filter 85



Longer, yet lighter.

Warning: The Surgeon General Has Determined That Cigarette Smoking Is Dangerous to Your Health.

12 mg "tar" 1.0 mg nicotine av per cigarette by FTC method

1005052486

Source: https://www.industrydocuments.ucsf.edu/docs/ggnk0000



Regular: 12 mg. "tar", 1.0 mg. nicotine; Menthol: 10 mg. "tar", 0.8 mg. nicotine av. per cigarette. FTC Report Dec. '79.

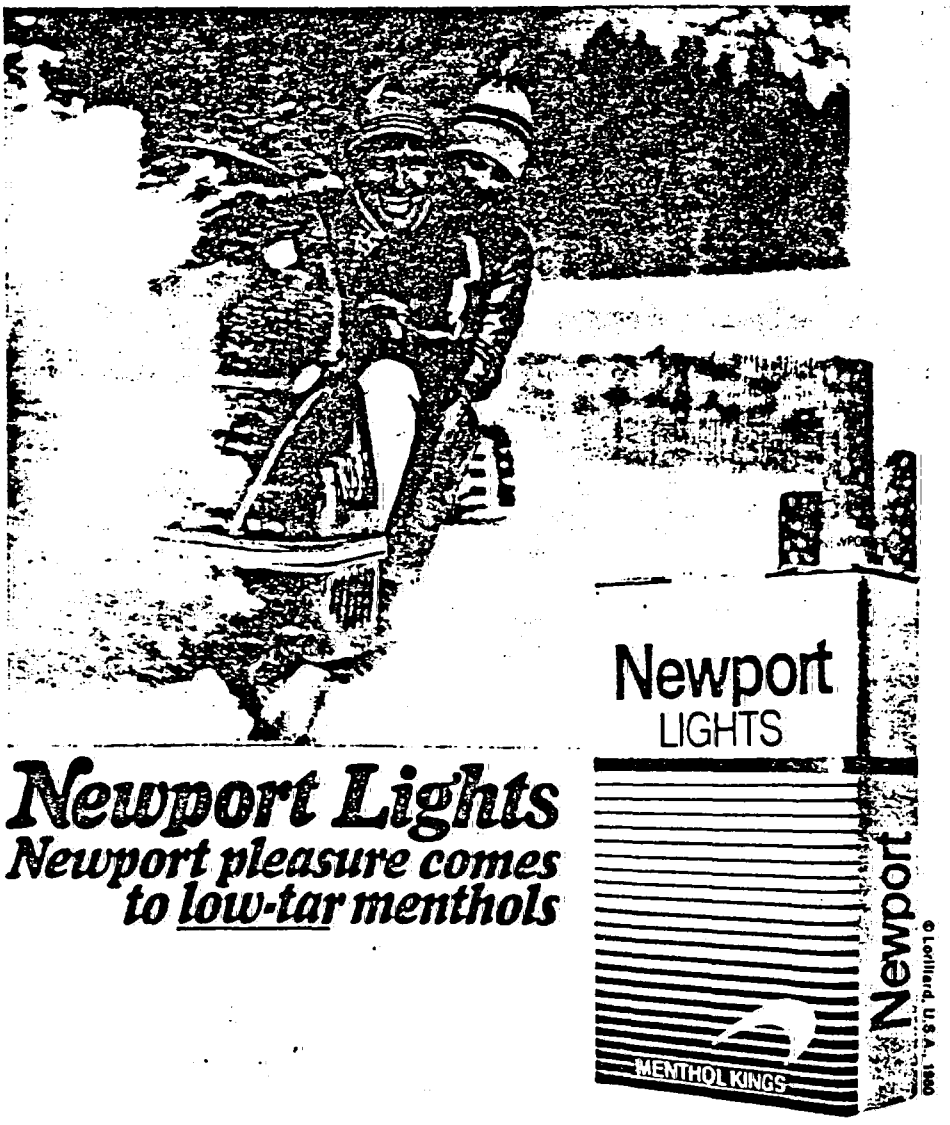
COSMOPOLITAN 6/80

1005052487

Source: https://www.industrydocuments.ucsf.edu/docs/qqmk0000

Popular Science, 3/80

Revive your taste!



Newport Lights
Newport pleasure comes to low-tar menthols

Warning: The Surgeon General Has Determined That Cigarette Smoking Is Dangerous to Your Health.

10 mg. "tar", 0.8 mg. nicotine av. per cigarette, FTC Report May 1978.

1005052488

Source: https://www.industrydocuments.ucsf.edu/docs/ggmk0000

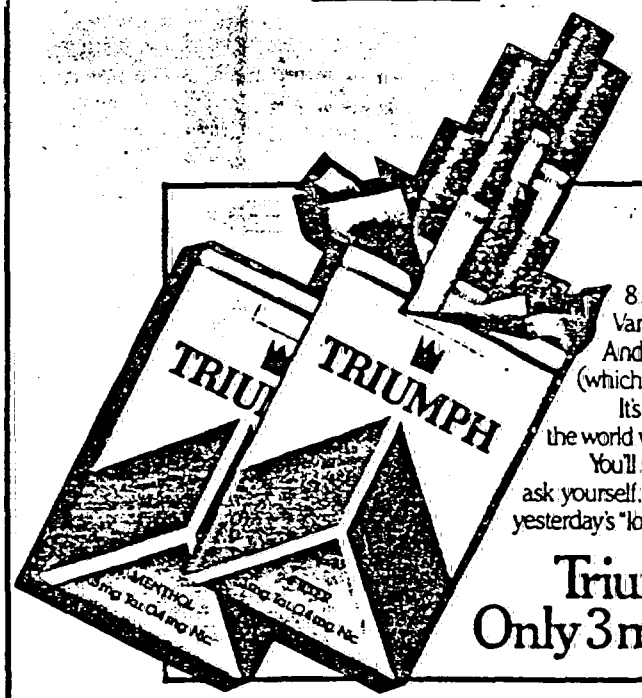
People, 1-28-80

© Lorillard, U.S.A., 1979

Warning: The Surgeon General Has Determined That Cigarette Smoking Is Dangerous to Your Health.

Triumph for Tar Watchers!

Triumph shakes up the "low tars" with taste, and a lot less tar.



Don't let them fool you any more. Today's low tar with taste is not an 8 mg tar (like Merit) or an 11 (like Vantage) or a 12 (like Marlboro Lights). And it's certainly not a Carlton at 1 (which doesn't even claim to have taste). It's a 3 mg tar Triumph. All the words in the world won't tell you how good it tastes. You'll simply have to try it. Taste it. Then ask yourself, isn't it time you came down from yesterday's "low tar" to Triumph – today's low tar.™

Triumph for taste! Only 3 mg tar.

Of All Brands Sold: Lowest tar: 0.5 mg. "tar," 0.05 mg. nicotine av. per cigarette. Triumph: 3 mg. "tar," 0.4 mg. nicotine av. per cigarette by FTC Method.

1005052489

Source: https://www.industrydocuments.ucsf.edu/docs/ggmk0000

1005052490

Source: https://www.industrydocuments.ucsf.edu/docs/ggmk0000



Considering all I'd heard, I decided to either quit or smoke True.

I smoke True.



© Lorillard 1975

The low tar, low nicotine cigarette. Think about it.

Warning: The Surgeon General Has Determined That Cigarette Smoking Is Dangerous to Your Health.

King Regular: 11 mg. "tar", 0.6 mg. nicotine, 100's Menthol: 13 mg. "tar", 0.8 mg. nicotine, av. per cigarette, FTC Report April '75.

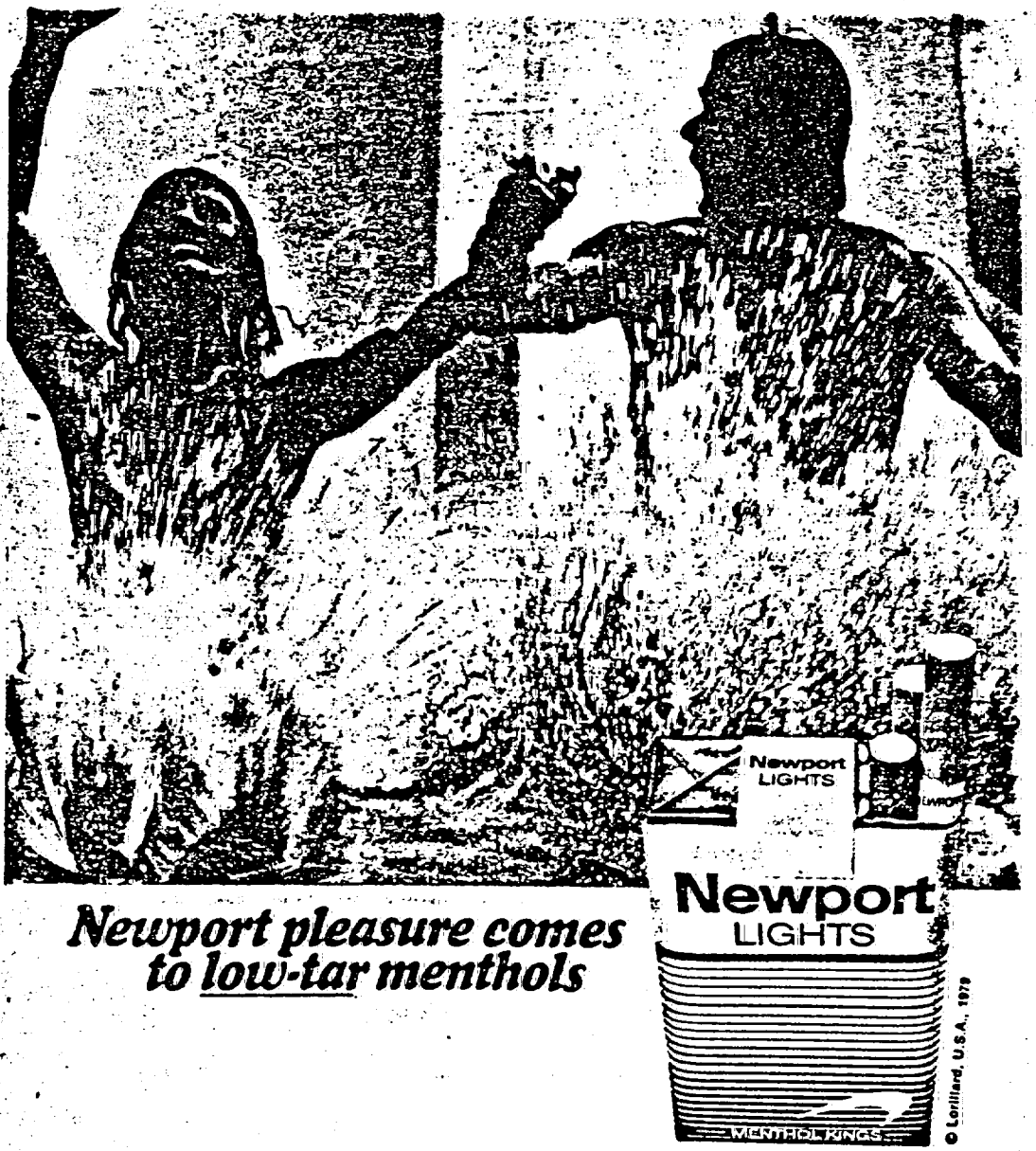
Cosmopolitan Jan 76

1005052491

Source: https://www.industrydocuments.ucsf.edu/docs/ggmk0000

Revive your taste!

Newport Lights



Newport pleasure comes to low-tar menthols

Warning: The Surgeon General Has Determined That Cigarette Smoking Is Dangerous to Your Health.

10 mg. "tar", 0.8 mg. nicotine av. per cigarette, FTC Report May '1978.

People, 10-1-79

1005052492

Source: https://www.industrydocuments.ucsf.edu/docs/ggmk0000



2/80

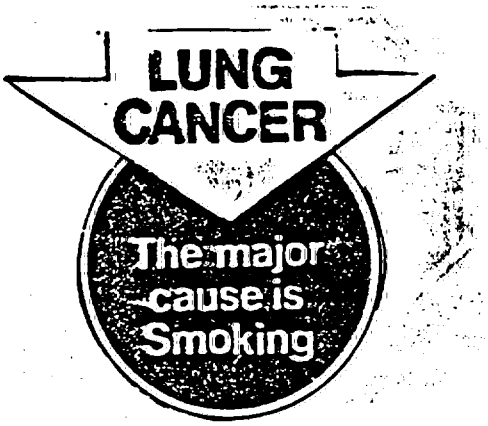
10050524 93

Source: https://www.industrydocuments.ucsf.edu/docs/ggmk0000

APPENDIX B

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Source: https://www.industrydocuments.ucsf.edu/docs/gamb0000



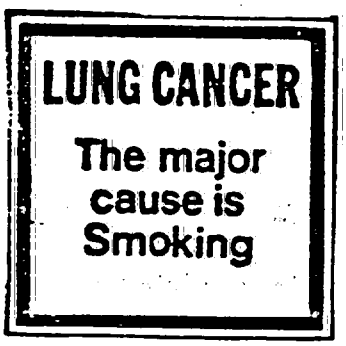




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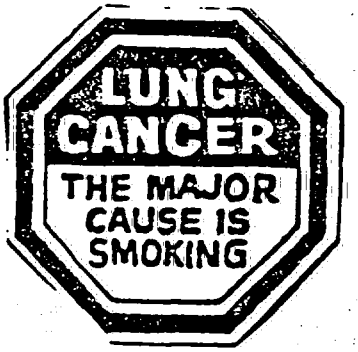






1005052496

Source: https://www.industrydocuments.ucsf.edu/docs/gbnk0000



Lung Cancer: the major cause is Smoking.



10050497

Source: https://www.industrydocuments.ucsf.edu/docs/gqnk0000

APPENDIX C

10050498

Source: https://www.industrydocuments.ucsf.edu/docs/ggmk0000

APPENDIX C

SWEDISH ROTATIONAL WARNINGS

1. MOTHERS TO BE:

Nicotine and carbon monoxide are transmitted through the bloodstream to the fetus which could be injured by these substances.

2. A SMOKER'S COUGH IN THE MORNINGS:

A smoker's cough is a sign of incipient ill health. Your cough will stop if you stop smoking.

3. CHILDREN OF PARENTS WHO SMOKE:
Are more often prone to bronchitis and pneumonia than children whose parents don't smoke.

4. LUNG CANCER REAPS MORE VICTIMS THAN ROAD ACCIDENTS.

Most lung cancer deaths can be attributed to smoking.

5. EMPHYSEMA IS A DISEASE:

Of the lung tissue which can cause breathing difficulties. Mainly affects smokers.

6. MORE AND MORE PEOPLE ARE SUFFERING:

From heart infarct and other vascular diseases. This applies especially to smokers.

7. SMOKERS GET ULCERS:

More often than non-smokers. Ulcers heal faster if you stop smoking.

8. PAINS IN YOUR LEGS:

Can be caused by smoking which reduces the supply of oxygen to the muscles. Your condition could deteriorate if you continue smoking.

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Source: https://www.industrydocuments.ucsf.edu/docs/ggmk0000

9. SMOKING AND AIR POLLUTANTS:

(E.g., asbestos, radon) make dangerous combination which increases the risk of lung cancer.

10. SMOKY AIR - PASSIVE SMOKING:

Can cause discomfort to people with asthma and other allergies and endanger people with cardiac diseases.

11. SMOKING DURING PREGNANCY AND BREAST-FEEDING:

Can injure your child.

12. DO YOU WANT TO BE IN GOOD PHYSICAL CONDITION:

Your physical condition will improve rapidly if you stop smoking.

13. YOUNG PEOPLE:

The earlier you start to smoke the more dangerous it is. Young smokers can be very quickly affected.

14. IT PAYS TO STOP SMOKING:

It has been proved that people who stop smoking run less risk of poor health.

15. WHAT CIGARETTES ARE MOST DANGEROUS:

Those that give most carbon monoxide, tar and nicotine. Compare the informative labelling on different brands.

16. IF YOU CONTINUE SMOKING:

At least try to cut down, avoid strong cigarettes, leave long butts and, above all, try not to inhale.

1005052500

Source: https://www.industrydocuments.ucsf.edu/docs/ggmk0000

APPENDIX D

100502501

Source: https://www.industrydocuments.ucsf.edu/docs/ggnk0000

APPENDIX D

The Operation of a Rotational Warning System

The described illustrative rotational warning system was developed in consultation with experts at a New York advertising agency to maximize its effectiveness and hold to a minimum the costs and administrative burdens it would impose upon the cigarette industry and its advertising agencies. As described, the rotational warning system would probably not cause substantial administrative problems for the cigarette companies, would probably not require hiring additional administrative personnel, and would probably not add much to the overall cost of each company's advertising budget.

The proposed rotational warning system could require that each cigarette brand be assigned a list of all of the warnings. The lists assigned to different brands could begin with different warnings so that at any one time each of the different warnings would be in the marketplace. Each brand could then be required to include in all of its advertising for, perhaps, the next three months the warning that was at the top of its assigned list. On a quarterly basis the warning carried by each brand on its advertisements could be rotated to the next warning in sequence on its list. By rotating the warnings on a quarterly basis the administrative and financial expense to the cigarette industry should be held to a minimum.[1]

---

[1] Keenan & McLaughlin, Cigarette Warning Project; See Ch. V.

1005052502

Source: https://www.industrydocuments.ucsf.edu/docs/ggmk0000

There are a number of advantages to rotating the warnings on a brand by brand, rather than on a company by company, basis. First, because the system requires different brands to begin their rotational sequence with different warnings, all of the warnings could appear in the marketplace at all times. If the warnings were assigned on a company by company basis, only six warnings could appear at any one time and some warnings might not appear for significant periods of time. Second, by assigning different warnings on a brand by brand basis, each of the warnings could receive approximately the same level of exposure from the beginning. If the health warnings were assigned company by company, those warnings assigned to the smaller cigarette companies, which advertise less or which have fewer brands, would receive less exposure over the short run. Third, assigning the warnings by brand substantially could reduce the risk that any one company would be overly identified with a particular warning even over the short run.

Moreover, it appears that assignment of the health warnings by brand rather than by company could hold down additional administrative or financial burdens. Advertisements are developed and prepared separately for each brand, and each cigarette company generally maintains a separate managerial and administrative staff for each brand.

Solely for the purpose of illustration, assume that there would be sixteen separate warnings as in the Swedish system. The following method of implementing the rotational scheme might be used. Each cigarette company could be assigned a master schedule through a random draw (A-F). Each schedule could contain sixteen lists and

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Source: https://www.industrydocuments.ucsf.edu/docs/ggmk0000

each list would contain all sixteen warnings. Schedule A would begin with a list which starts with the first warning, Schedule B with a list which starts with the fourth warning, Schedule C with the seventh, Schedule D with the tenth, Schedule E with the thirteenth, and Schedule F with the sixteenth. Each company could then assign one list of all of the warnings in sequence to each of its brands. For example, the company with master Schedule A with the first list starting with the first warning, could initially assign the first list to one of its brands, then assign the list starting with the second warning to a second brand and so on until it ran out of brands. If the company had more than sixteen brands, it could simply start over again at the list beginning with warning number one when it reached its seventeenth brand. The advertising for each brand would then begin with the assigned warning at the top of its list and rotate through the other warnings in sequence. Initially, each manufacturer could decide which of its brands will be assigned which list within its master schedule. Thereafter, whenever a new brand is added to the product line its message schedule would follow consecutively after the company's previous last brand.

The warnings could be rotated in all of the advertising for a single brand on a quarterly basis in accordance with the systems described below for each medium:

Print Media (Newspapers, Magazines, Theater Pamphlets, Magazine and Newspaper Inserts). In each of the print media, all of the advertisements of a particular brand could carry the same warning during each quarter. Every three months all of a brand's print advertising could change to the next warning on that brand's message

1005052504

Source: https://www.industrydocuments.ucsf.edu/docs/ggmk0000

sequence list. The date on the cover of each magazine or newspaper will determine what quarter that publication appears in, and, therefore, which message will be displayed in its cigarette advertising. Using the cover date appears to be the most manageable way to administer the rotating scheme in the print media, because that is the method by which advertising space is purchased. For inserts into magazines or newspapers, the cover date on the carrying publication governs.

Sidewalk Posters, Transit Placards. The rotation of the warning messages in these media would be governed by the actual scheduled appearance date of the advertisement. Transit advertising is routinely changed monthly. Thus, in the month that begins a new quarter, the fact that the replacement ads would include the next warning on each brand's message sequence list should not involve a substantial cost or administrative burden.

Mail Circulars, Give-Away Items, Point-of-Purchase. Items of this nature are usually produced all at one time yet have an indefinite promotional life, making it impracticable to rotate the warning message. Staff considered several options to deal with this problem, because it is especially important for the warnings to appear in point-of-purchase material to ensure the warnings' overall effectiveness. If a health warning did not appear in point-of-purchase promotions, consumers would make the decision to buy cigarettes while exposed to positive images of smoking, but without information on smoking's health hazards. Under staff's proposed system, the particular warning printed on items of this nature will be determined by the date the item is ordered. Thus, a promotional

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Source: https://www.industrydocuments.ucsf.edu/docs/ggmk0000

tem for a brand of cigarettes would display the same warning as was included on the rest of that brand's advertising on the day the item was ordered.[2] Technically, there will be no rotation of warnings within each of these items. Over time, however, as the cigarette companies continue to produce give-away and point-of-purchase promotional material for each of their brands, all of the warnings would be exposed.

Outdoor Billboards. Staff, in conjunction with the Commission's Division of Compliance, believes that making warnings the length of those proposed as samples clearly visible at the distance from which billboards are normally seen by the passing consumer could take up a substantial amount of a billboard's space. Therefore, a rotational warning system for billboards must take into account the limitations of within-ad disclosures in that medium.

The staff considered several options to provide an effective warning on billboards . One option is to waive entirely the warning requirement for billboards. However, one-half of all billboards are devoted to cigarette advertising. A second option is to require the placement of the identical rotational warnings proposed for other media in billboards, but at a size large enough to be easily read by the public. Depending on the size of the lettering and the warning symbol found appropriate for use on billboards, this approach could

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[2] There may be some promotional or point-of-sale items that are too small to carry a warning (e.g., matchbooks). Public comment is solicited on how to determine the size of the items below which no warning need be affixed.

Source: https://www.industrydocuments.ucsf.edu/docs/ggmk0000

take up a significant amount of additional space. A third possibility would be to shorten the text of the warnings for use in billboards, so that the increase in size would consume less space on the billboard. For example, a number of the warnings described in this report as illustrative of the type of warnings the Commission might consider could be shortened for use on billboards as follows:

"DANGER: Smoking Causes Cancer," or

"WARNING: Smoking Causes Heart Attack" or

"PREGNANT WOMEN: Smoking Endangers Your Unborn Child."

The major problem with this option is that it is not clear that the proposed warnings can be shortened sufficiently to be read on a billboard and still maintain their understandability, objectivety and accuracy. A fourth option would be to permit billboards to be placed without a health warning or with only the new health warning logo, and to require the manufacturers to devote a certain number of their billboards solely to the disclosure of the appropriate rotational health warning in an expanded size.[3] This option permits the most

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[3] Advertisers buy billboard space in each geographic area according to their estimates of the total number of people in that geographic area who will see at least one of their billboards on a regular basis. If the fourth option requiring some billboards to be devoted solely to a health warning is adopted, that option could be implemented by requiring that the health warning be carried on a percentage of each cigarette manufacturer's outdoor advertising budget. To ensure that the warning messages were not placed in the least noticeable locations, the Commission could require that the percentage of illuminated and non-illuminated billboards be the same as the rest of the companies' billboards. Since illuminated boards are generally placed in the best locations, this could mean that the warning message boards would receive adequate exposure. The health warnings would then be rotated on a quarterly basis, in conjunction with the rest of each brand's ads. A quarterly rotation should not

(Continued)

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Source: https://www.industrydocuments.ucsf.edu/docs/ggmk0000

effective display of the mandated health warning. One drawback to this option may be the cost to the cigarette advertiser of placing billboards that do not advertise its product. However, the greater effectiveness of the warning coupled with the lessened interference with the advertiser's message could possibly justify this cost. The fact that the fourth option may cost cigarette manufacturers more than the other options is an issue which merits serious continued consideration. If further investigation or public comment indicates that an effective warning on billboards can be obtained using a less costly option, that option might be preferable.

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[3] (Footnote Continued)

cause a substantial administrative burden because billboard advertisements ordinarily are changed frequently.

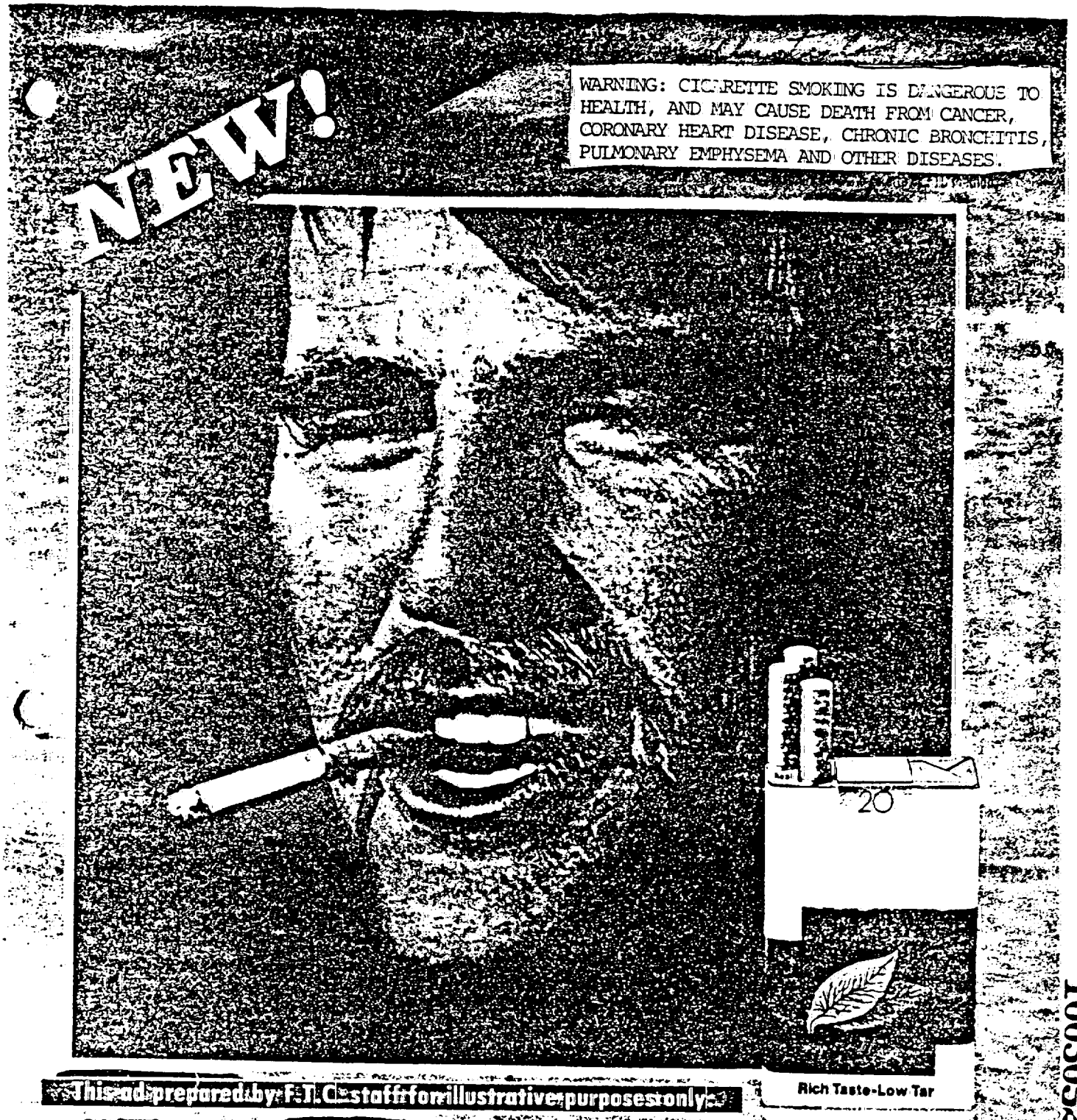
Source: https://www.industrydocuments.ucsf.edu/docs/ggmk0000

APPENDIX E

Sample Warnings, Including A Single New Warning, In An Advertising Format

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Source: https://www.industrydocuments.ucsf.edu/docs/ggmk0000



This ad prepared by F.T.C. staff for illustrative purposes only.

"Taste [redacted] new golden taste! Richer...mellower than before."

[redacted] new golden leaf tobacco blend does it.
Tastes richer...mellower...more satisfying.
A taste that's pure gold.

The smoking man's low tar

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Source: https://www.industrydocuments.ucsf.edu/docs/ggmk0000



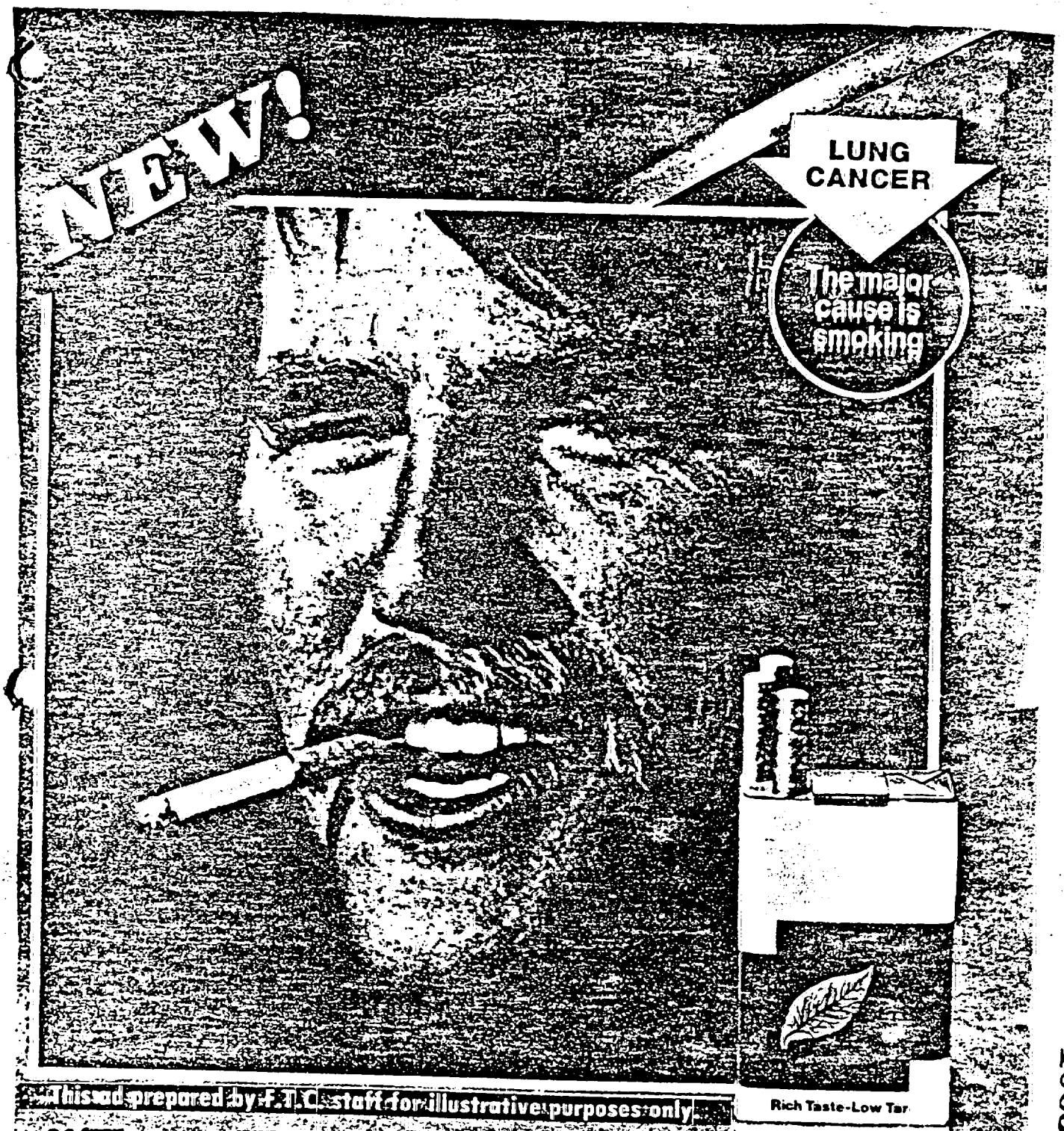
"Taste [redacted] new golden taste! Richer...mellower than before"

[redacted] new golden leaf tobacco blend does it.
Tastes richer...mellower...more satisfying.
A taste that's pure gold.

The smoking man's low tar

1005052511

Source: https://www.industrydocuments.ucsf.edu/docs/ggmk0000



This ad prepared by F.T.C. staff for illustrative purposes only.

"Taste [redacted] new golden taste!
Richer...mellower than before"

[redacted] new golden leaf tobacco blend does it.
Tastes richer...mellower...more satisfying.
A taste that's pure gold.

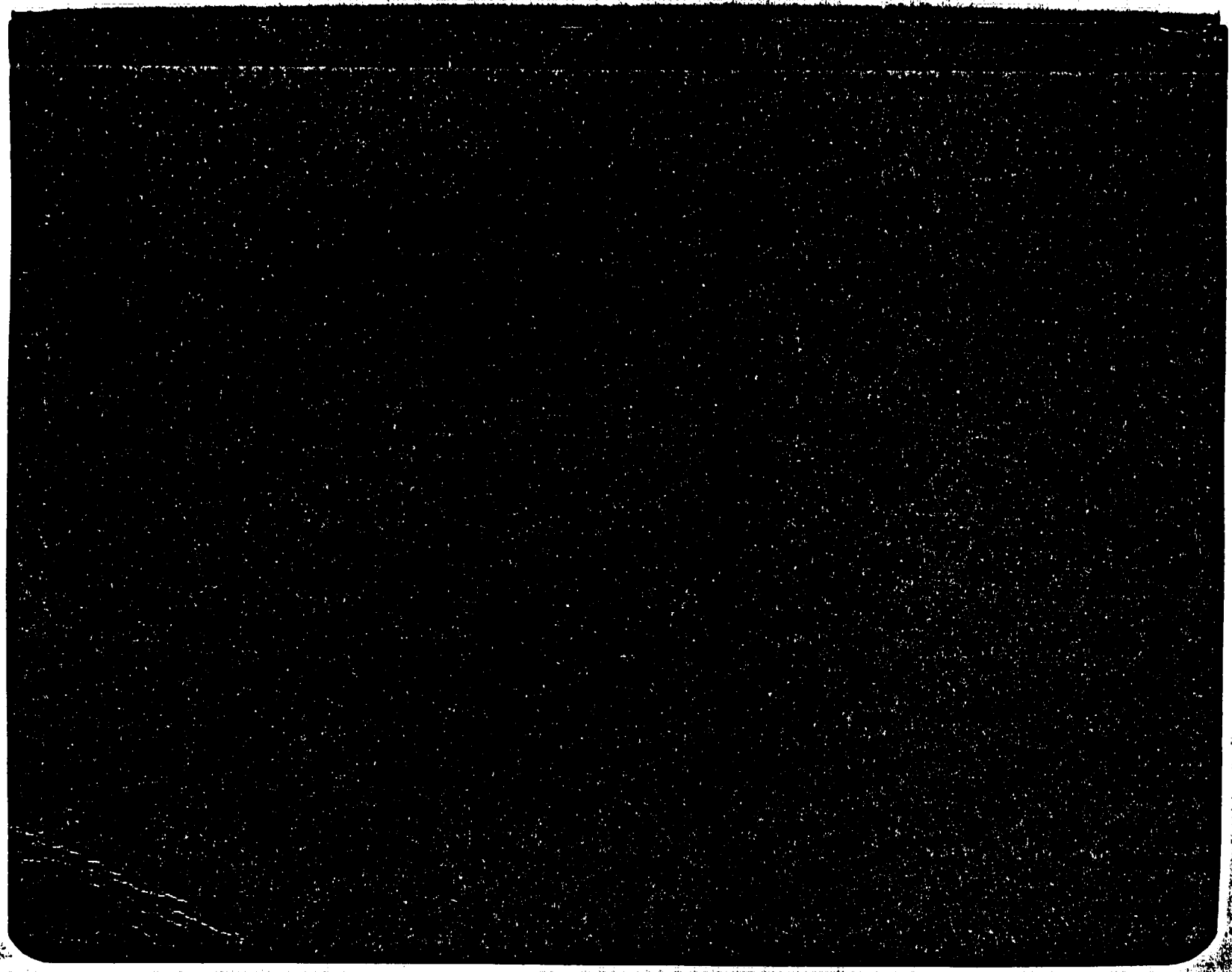
The smoking man's low tar.

Source: https://www.industrydocuments.ucsf.edu/docs/ggmk0000

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http://www.industrydocuments.ucsf.edu/docs/gjur0000